SECTION

2 OF 25

Table A-1. Summary of 100-N Facilities

Facility Code	Facility Type	Area	Operable Unit	Site Dimensions (m)	Facility Status	Construction Date	Demolition/ Removal/ Cocooned Date	Facility Description
104-N	Storage	100	100-NR-1	6.1 × 7 (facility dimensions) 7.3 × 7.3 (concrete pad)	Demolished	1982	1996	The 104-N Facilities Auxiliary Shop was a rectangular, corrugated-metal storage building with wood framing on a concrete slab. There was also a fenced storage yard next to the facility. The 104-N Facility was used for a snubber repair shop during plant operations. After shutdown, it was used for storage.
105-N	Reactor	100	100-NR-1	164.9 × 79.9 (105-N)	Inactive	1963	Not Recorded	The 105-N Reactor (105-N) was a dual-purpose nuclear reactor and contained the reactor block, front and rear elevators, pipe galleries, exhaust fans, a receiving basin for spent fuels, offices, control rooms, electrical and instrument rooms, a shop area, ventilation supply, metal preparation and storage areas, fuel storage basin, and a transfer area. The 105-N Reactor Building was deactivated in 1998 and is in the process of being placed in ISS.
105-NA	Pump Station	100	100-NR-1	2.44 × 7.32	Inactive	1975	Not Recorded	The 105-NA Emergency Diesel Enclosure was a 17.9 m^2 (192 ft^2) pre-engineered, metal-framed building with a flat metal ribbed roof. The west wall was metal siding; the north wall was metal siding and wire mesh and contained the only door to the facility. The east and south walls were shared with 105-N Reactor Building. The 105-NA Emergency Diesel Enclosure housed an emergency lift station diesel pump that has been deactivated and the associated underground diesel oil storage tank was removed in December 1990.
105-NB	Maintenance Shop	100	100-NR-1	32.0 × 24.4	Demolished	1986	2008	The 105-NB Mechanical Shop Addition was a 32 × 24.4 m (105 × 80 ft) one-story steel-frame building with painted steel siding attached to the north side of the 105-N Reactor Building. The building was on a reinforced-concrete slab foundation and had a steel gable roof. The 105-NB Mechanical Shop Addition was used as a maintenance shop. It was demolished in August 2007 and the concrete slab foundation was removed in May 2008.
105-NC	Storage	100	100-NR-1	12.2 × 11.6	Demolished	1988	1997	The 105-NC Emergency Diesel Generator Building was a 12.2 × 11.6 m (40 × 38 ft) reinforced concrete building with a flat roof. Built in 1988 it was never used. The 105-NC Emergency Diesel Generator Building was built as part of the N Reactor safety enhancement program following the 1986 Chernobyl accident. The building was constructed in 1988 but never used. Except for two diesel oil storage tanks, which were never used, no equipment was installed in the facility. When directions to shutdown N Reactor were given, work stopped on the construction of 105-NC. The building was demolished between March 1996 and July 1997.
105-ND	Process Unit/Plant	100	100-NR-1	3.4 × 2.4	Inactive	1987	Not Recorded	105-ND Remote Air Intake consisted of a 35.6 cm (14 in.) -diameter pipe encased in a reinforced concrete trench, approximately 1.8 m wide × 1.1 m tall (5.75 × 3.5 ft). On one end of the pipe was the Remote Air Intake, an above-grade concrete block approximately 1.8 × 2.4 m × 2.6 m tall (6 ft × 8 ft × 12 ft), with an internal screen and a manhole cover on top. The trench at the Remote Air Intake end ran from the south side of 100-N near the security fence separating N Reactor from the Hanford Generating Plant, below grade, to the local air intake on the east side of the 105-N Reactor building before connecting into the 105-N control room vestibule inside the 105-N reactor building. A connecting pipe joined this run at its nearest point to the 182-N High Lift Pump House, making a joining connection to 182-N.
105-NE	Process Unit/Plant	100	100-NR-1	5.2 × 5.8 × 9.1	Inactive	1963		The 105-NE Fission Products Trap (a.k.a., 1305-N), was a 5.2 × 5.8 m (17 × 19 ft) reinforced concrete structure approximately 9.1 m (30 ft) deep. The above grade structure was about 1.5 m (5 ft) high with sloping sides and flat top. A steel plate on the roof covered above grade access into the structure. The bottom of the structure had a circular pit 2.7 deep × 3.4 m in diameter (9 × 11 ft).

Table A-1. Summary of 100-N Facilities

Facility Code	Facility Type	Area	Operable Unit	Site Dimensions (m)	Facility Status	Construction Date	Demolition/ Removal/ Cocooned Date	Facility Description
107-N	Process Unit/Plant	100	100-NR-1	14.3 × 21.0 × 14.6 (107-N building) 29.0 (Length of pipe trench connecting 105-N and 107-N)	Demolished	1985	Not Recorded	The facility was a reinforced-concrete structure with a steel-framed, metal-sided annex on the north end. During its operating years from 1984 through 1989, the facility recirculation system cooled and filtered water from the 105-N Irradiated Fuel Storage Basin in order to reduce or eliminate the need to discharge water to the crib areas associated with N Reactor operations. Facility components included: a pump well and two recirculation pumps, two heat exchangers, two sandbed filters, a sand filter backwash tank, three ion exchange vessels, one caustic tank, one acid tank, one regeneration waste collection tank, one resin loadout tank, three building sumps, and one hydrogen peroxide tank and pump. The 107-N Building is in the process of being demolished (as of February 27, 2008). It is estimated more than 100 curies of radioactive material remained in the facility at the start of D&D activities (BHI-01725). Major radionuclides were Am-241, Co-60, Cs-137, Pu-239/240, Pu-241, and Sr-90. The primary source of liquid and sediment in the 107-N Building was water, dissolved solids, and suspended solids from the 105-N Fuel Storage Basin.
108-N	Storage	100	100-NR-1	8.2 × 9.1	Demolished	1963	2007	The 108-N Facility consisted of several parts: a pump house, three acid storage tanks, one caustic storage tank, a pneumatic transfer tank, an underground neutralization pit, and, tank car unloading station. It was used to receive, transfer, and store caustics and acids for use in the 163-N Demineralizer Building for regeneration of ion exchange beds (BHI-00221).
109-N	Process Unit/Plant	100	100-NR-1	NA	Inactive	1963	Not Recorded	The 109-N Heat Exchanger Building contained a pipe gallery, auxiliary cell, six steam generator cells in parallel, each cell containing two steam generators, a drive turbine, a circulating water pump and associated piping, valves, and instrumentation. Primary coolant was circulated through the 105-N Reactor to steam generators located in the 109-N Heat Exchanger Building and then routed back to the reactor via primary coolant pumps. Secondary steam from the steam generators was either dumped into water-cooled dump condensers or piped to the 185-N HGP to generate electricity. Circulation of radioactive primary coolant through the 109-N Systems contaminated the equipment, piping, and steam generators to levels comparable with the 105-N Reactor primary cooling system piping and equipment. Tube leaks in the 109-N Steam Generators allowed small amounts of radiologically contaminated primary water to be carried to the 109-N Secondary Systems and to the HGP. 109-N Heat Exchanger Building has been deactivated. The steam generator cells, pipe gallery, auxiliary system cell, and pressurizer cell will become part of the SSE during the ISS of the 105-N Reactor. Two of three chemical storage tanks have been removed with their concrete pedestals remaining. The third tank, which stored ammonium hydroxide, remains as of February 2008. Two of four transformers were removed; the concrete pads have not been removed as of February 2008. 109-NA housed instruments for monitoring steam flow to the HGP and condensate return to 109-N. 109-NB housed hydraulic power packs that were used to power the HPV 201 Valves in the 109-N Heat Exchanger Building. The 109-NA Steam & Flow Instrument Building and the 109-NB Hydro Power Unit have been demolished to concrete slab-on-grade. THE HPU Building was a 33.8 m^2 (364 ft^2), pre-engineered, one-story, metal building with metal siding and roofing, on a concrete slab (BHI-00221).
109-NA	Monitoring Station	100	100-NR-1	2.13 × 1.37	Demolished	1966	1996	The 109-NA Steam & Flow Instrument Building was a 3.7 m^2 (40 ft^2) single-story, steel-framed building with plywood siding and roofing, on a concrete slab. 109-NA housed instruments for monitoring steam flow to the HGP and condensate return to 109-N.
109-NB	Process Unit/Plant	100	100-NR-1	8.53 × 5.49 × 3.66	Removed	1986	1996	The 109-NB Hydro Power Unit (HPU) Building was a 33.8 m^2 (364 ft^2) pre-engineered, single story, metal building with metal siding and roofing, on a concrete slab. A 4.6 m (15 ft) metal extension to the building connected it to the 109-N facility. 109-NB housed hydraulic power packs that were used to power the HPV 201 valves in the 109-N Heat Exchanger Building.

Table A-1. Summary of 100-N Facilities

Facility Code	Facility Type	Area	Operable Unit	Site Dimensions (m)	Facility Status	Construction Date	Demolition/ Removal/ Cocooned Date	Facility Description
1100-N	Office	100	100-NR-1	70.1 × 12.2	Demolished	1961 (moved to 100-N)	1994	The 1100-N Building facility contained three restrooms, two kitchens, and 53 offices. The photographic record logbook indicates the facility was to be a TC Office. No known processes that produced hazardous waste, other than routine building maintenance activities (light ballast and light bulb replacement), occurred within the facility.
1101-N	Office	100	100-NR-1	121.92 × 42.0624	Demolished	Not Recorded	1994	The 1101-N Office Building was originally used as an office building by the construction contractor during 100-N construction and then as administrative offices following completion of construction.
1102-N	Office	100	100-NR-1	12.2 × 6.1	Demolished	Not Recorded	1994	The 1102-N had three rooms and a bathroom with fluorescent lighting, and walls covered with sheetrock. The 1102-N originally was used for administrative purposes and personnel training. The offices were later converted into a lunchroom and kitchen facility.
1103-N	Office	100	100-NR-1	1,866.0 m^2	Active	late 1970s-early 1980s	Not Recorded	1103-N consisted of 15 sheet-metal and plywood trailers on I-beam trailer frames. It contained approximately 60 offices and 10 larger workstations, along with kitchens and restrooms. The facility was connected to the 124-N-7 Septic Tank.
1104-N	Office	100	100-NR-1	1,002.4 m^2	Removed	late 1970s-early 1980s	Not Recorded	1104-N consisted of 12 sheet-metal and plywood trailers on I-beam trailer frames. The 1104-N Building provided administrative office space for personnel in 100-N. It contained approximately 60 offices and 10 larger workstations, along with kitchens and restrooms. The facility was connected to the 124-N-7 Septic Tank.
1105-N	Office	100	100-NR-1	122.6 m^2	Removed	late 1970s-early 1980s	Not Recorded	1105-N consisted of two sheet-metal and plywood trailers on I-beam trailer frames. The 1105-N Building provided administrative office space for personnel in 100-N.
1107-N	Office	100	100-NR-1	124.9 m^2	Removed	late 1970s-early 1980s	Not Recorded	1107-N consisted of two sheet-metal and plywood trailers on I-beam trailer frames. The 1107-N Building provided administrative office space for personnel in 100-N. It contained four offices and a restroom, and was used as a training facility.
1109-N	Office	100	100-NR-1	124.9 m^2	Removed	late 1970s-early 1980s	Not Recorded	1109-N consisted of two sheet-metal and plywood trailers on I-beam trailer frames. The 1109-N Building provided administrative office space for personnel in 100-N. It contained eight offices and restroom facilities.
1110-N	Office	100	100-NR-1	147.2 m^2	Active	1979	Not Recorded	1110-N consisted of two sheet-metal and plywood trailers on I-beam trailer frames. The 1110-N Facility was used to provide office space in 100-N. It contained 10 offices and was not equipped with restroom facilities.
1111-N	Office	100	100-NR-1	144.0 m^2	Removed	1980s	Not Recorded	1111-N consisted of two sheet-metal and plywood trailers on I-beam trailer frames. The 1111-N Building was connected to the 124-N-5 Sewer System. It contained restrooms and six offices, and was used to house administrative personnel.
1112-N	Office	100	100-NR-1	28.0 × 7.6 (1112-N Guard Station) 3.7 × 3.7 (1112-NA Microwave Tower Annex building) 6.1 × 6.1 × 25.0 (1112-NA Tower (dimensions are for base)) 3.0 × 2.1 (1112-NB Badge House)	Demolished	1981	Not Recorded	The 1112-N Guard Station originally served as a security access control point to the 100-N Limited Access Area. Following 100-N Reactor shutdown, the facility served initially as document storage and later as office space. The 1112-NA Microwave Tower Annex and a portion of 1112-N, served as the central communications hub for the 100 Area. The 1112-NA Microwave Tower enabled telecommunications with 100F, 100H, and 100D/DR. As of April 2008, the 1112-N and 1112-NA Facilities are still active. The 1112-NB SEA Badge House was built in 1984 and used to house security personnel who issued SEA badges to personnel who required access to the 105-N Buildings, but did not regularly work there. A radiological survey taken in December 1995 showed the facility was not contaminated (N-1196). The building was removed in 1996. 1112-N has been demolished to slab-on-grade. The 1112-NA Microwave Tower is still standing.

Table A-1. Summary of 100-N Facilities

Facility Code	Facility Type	Area	Operable Unit	Site Dimensions (m)	Facility Status	Construction Date	Demolition/ Removal/ Cocooned Date	Facility Description
1112-NA	Control Structure	100-N	100-NR-1	3.66 × 3.66	Demolished	1982	2009	The 1112-NA Microwave Tower Annex was a square, one story, sheet-metal, and metal frame structure with a poured concrete foundation, and corrugated metal exterior wall surfaces and a flat roof. It was directly below the microwave tower and measures 4 × 4 m (12 × 12 ft).The 1112-NA Microwave Tower Annex and a portion of 1112-N, served as the central communications hub for the 100 Areas. The 1112-NA Microwave Tower enabled telecommunications with the 100F, 100H, and 100D/DR areas. As of October 2009, 1112-NA has been demolished.
1112-NB	Control Structure	100-N	100-NR-1	6.1 × 6.1	Demolished	1984	1996	1112-NB Special Entry Authorization (SEA) Badge House was built in 1984 and used to house security personnel who issued Special Entry Authorization (SEA) badges to personnel who required access to the 105-N buildings, but did not normally work there. A radiological survey taken in December 1995 showed the facility was not contaminated. The building was removed in 1996. The concrete slab remains.
1113-N	Office	100	100-NR-1	331.7 m^2	Removed	1980	Not Recorded	1113-N consisted of four sheet-metal and plywood trailers on I-beam trailer frames. The trailer was connected to the 124-N-6 Sewer System. The 1113-N Facility was used to provide office space for Environmental & Radiation Control personnel in 100-N. It contained 20 offices, restrooms, and a kitchen.
1114-N	Office	100	100-NR-1		Demolished	1980	2007	1114-N was one of several mobile offices that were installed in 100-N in the 1980s. It consisted of four sheet-metal and plywood trailers on I-beam trailer frames. The building was connected to the 124-N-6 Sewer System and was attached to the 1114-NA (MO-911) Mobile Office. Together with 1114-NA, the two facilities contained 20 offices, restrooms, and a kitchen.
1114-NA	Office	100	100-NR-1	223.1 m^2	Demolished	1980	2007	1114-NA consisted of two sheet-metal and plywood trailers on I-beam trailer frames. The building was connected to the 124-N-6 Sewer System and was attached to the 1114-N (MO-055) Mobile Office. The 1114-NA Facility was used to provide office space for Field Support personnel in 100-N. Together with 1114-N, the two facilities contained 20 offices, restrooms, and a kitchen.
1115-N	Office	100	100-NR-1	686.7 m^2	Demolished	1982	2007	1115-N consisted of eight sheet-metal and plywood trailers on I-beam trailer frames. The building was connected to the 124-N-6 Sewer System. The 1115-N Facility was used to house support personnel offices in 100-N. In addition to office space, 1115-N also contained a lunchroom/kitchen. (1N-91-00423W), 32 offices, restrooms, and two classrooms (WHC-SD-NR-RD-006).
1116-N	Office	100	100-NR-1	686.7 m^2 (1116-N) 589.0 m^2 (1116-NB)	Demolished	1982	2007	1116-N consisted of 10 sheet-metal and plywood trailers on I-beam trailer frames. The building was connected to the 124-N-5 Sewer System. The 1116-N Building was used as a training simulator for 100-N, and housed a replica of the 100-N Reactor Control Room. In addition, it also contained seven offices, a kitchen, and restrooms. The 1116-NB Air Compressor Building housed an air compressor needed to operate the 1116-N Training Simulator.
1116-NA	Office	100	100-NR-1	135.3 m^2	Removed	1980s	Not Recorded	1116-NA consisted of two sheet-metal and plywood trailers on I-beam trailer frames. The 1116-NA Mobile Office provided office space for maintenance and training personnel associated with the 1116-N Training Simulator. In addition, it also contained a kitchen and restrooms.
1116-NB	Storage	100	100-NR-1	2.59 × 1.98 × 2.44	Demolished	1986	2007	The 1116-NB Air Compressor Building housed an air compressor needed to operate the 1116-N Training Simulator.
1117-N	Office	100	100-NR-1	1,017.8 m^2	Removed	1980s	Not Recorded	1117-N consisted of 12 sheet-metal and plywood trailers on I-beam trailer frames. The building was connected to the 124-N-6 Sewer System. 1117-N provided office space. The building contained 47 separate offices along with kitchen and restroom facilities.

Table A-1. Summary of 100-N Facilities

Facility Code	Facility Type	Area	Operable Unit	Site Dimensions (m)	Facility Status	Construction Date	Demolition/ Removal/ Cocooned Date	Facility Description
1118-N	Office	100	100-NR-1	1,017.8 m^2	Removed	1980s	Not Recorded	1118-N consisted of 12 sheet-metal and plywood trailers on I-beam trailer frames. The building was connected to the 124-N-6 Sewer System. The 1118-N provided office space. The building contained 57 separate offices along with kitchen and restroom facilities.
1119-N	Change House	100	100-NR-1	257.5 m^2	Active	1977	Not Recorded	1119-N consisted of five sheet-metal and plywood trailers on I-beam trailer frames. The 1119-N Facility was used as a change house in 100-N. It was also equipped with restroom facilities.
1120-N	Office	100	100-NR-1	45.7 × 24.4 × 6.1	Active	1984	Not Recorded	1120-N was used as a warehouse, for offices, training, and potable water storage and preparation. The northeast corner of the facility is currently used to prepare potable water for personnel working in the field. Janitorial supplies and pest control supplies were located in rooms W2 and W3. Sign painters occupied room W1. For a brief period, room W5 was used for an RCT laboratory. Room 6 is currently a storage area for radioactive sources used to calibrate radiation detection instruments.
1123-N	Office	100	100-NR-1	122.6 m^2	Removed	1980s	Not Recorded	1123-N consisted of two sheet-metal and plywood trailers on I-beam trailer frames. The trailer was connected to the 124-N-5 Sewer System. The 1123-N provided office space. The building contained seven offices, a kitchen, and restrooms.
1124-N	Office	100	100-NR-1	122.6 m^2	Demolished	1978	2007	1124-N consisted of two sheet-metal and plywood trailers on I-beam trailer frames. The trailer was connected to the 124-N-5 Sewer System. The 1124-N provided office space. The building housed four offices, a kitchen, and restrooms. According to BHI-00627, the facility was later used for records storage.
1125-N	Office	100	100-NR-1	122.6 m^2	Removed	1980s	Not Recorded	1125-N consisted of two sheet-metal and plywood trailers on I-beam trailer frames. The 1125-N Building was transferred to the 200 Area prior to 1990 (WHC-SD-NR-RD-006). The 1125-N Building housed administrative personnel in 100-N. It contained a kitchen, restrooms, and eight offices.
1126-N	Office	100	100-NR-1	124.9 m^2	Removed	1979	Not Recorded	1126-N consisted of two sheet-metal and plywood trailers on I-beam trailer frames. The 1126-NA Trailer was installed between 1107-N and 1126-N to connect the two mobile offices together into one unit. The 1126-N Facility was used to house administrative personnel in 100-N. It contained six offices, a kitchen, and restroom facilities.
1127-N	Office	100	100-NR-1	124.9 m^2	Removed	1977	Not Recorded	1127-N consisted of two sheet-metal and plywood trailers on I-beam trailer frames. The 1127-N provided office space. It contained 10 offices and was used to house administrative personnel.
1128-N	Change House	100	100-NR-1	124.9 m^2 (Dimensions are for 1127-N, which appears to be identical to 1128-N)	Removed	1980s	Not Recorded	1128-N consisted of two sheet-metal and plywood trailers on I-beam trailer frames. The 1128-N Facility appears to have originally been installed as part of a reactor outage project, and was removed shortly afterward.
1129-N	Storage	100	100-NR-1	124.9 m^2	Removed	1980s	Not Recorded	1129-N consisted of two sheet-metal and plywood trailers on I-beam trailer frames. The 1129-N Facility was used to store spare parts for electrical instrumentation while it was in 100-N.
1130-N	Storage	100	100-NR-1	122.6 m^2	Removed	1980s	Not Recorded	1130-N consisted of two sheet-metal and plywood trailers on I-beam trailer frames. The 1130-N Trailer Building was used to store maintenance supplies. Minor repair tasks may also have been performed within the facility. After it was moved south and renumbered as 1143-NC, the trailer was still used for maintenance storage.
1131-N	Office	100	100-NR-1	122.6 m^2	Removed	1980s	Not Recorded	1131-N consisted of two sheet-metal and plywood trailers on I-beam trailer frames. The trailer was connected to the 124-N-5 Sewer System. The 1131-N Building provided office space. The building housed a single office, a restroom, and a large open area for drafting.

Table A-1. Summary of 100-N Facilities

Facility Code	Facility Type	Area	Operable Unit	Site Dimensions (m)	Facility Status	Construction Date	Demolition/ Removal/ Cocooned Date	Facility Description
1132-N	Office	100	100-NR-1	223.0 m^2	Removed	1980s	Not Recorded	1132-N consisted of four sheet-metal and plywood trailers on I-beam trailer frames. The trailer was connected to the 124-N-8 Sewer System. The 1132-N Facility provided office space for personnel in 100-N.
1133-N	Office	100	100-NR-1	223.0 m^2	Removed	1980s	Not Recorded	1133-N consisted of four sheet-metal and plywood trailers on I-beam trailer frames. The trailer was connected to the 124-N-8 Sewer System. The 1133-N provided office space. The building housed 15 offices, a kitchen, and restrooms.
1134-N	Office	100	100-NR-1	253.6 m^2	Removed	1984	1998	1134-N consisted of four sheet-metal and plywood trailers on I-beam trailer frames. The building was connected to the 124-N-8 Sewer System. The 1134-NA Line Conditioner Building was a small metal shack located off the north end of the 1134-N Building that contained electrical equipment. The 1134-N provided office space. The building housed seven offices, a kitchen, and restrooms.
1134-NA	Electrical Substation	100	100-NR-1	223.0 m^2	Removed	1984	1995	The 1134-NA Line Conditioner Building was a small metal shack located off the north end of the 1134-N building that contained electrical equipment.
1135-N	Office	100	100-NR-1	223.0 m^2	Removed	1982	Not Recorded	1135-N consisted of two sheet-metal and plywood trailers on I-beam trailer frames. The building was connected to the 124-N-8 Sewer System and was attached to 1135-NA. The 1135-N provided office space. Along with 1135-NA, the building housed 11 offices, a kitchen, and restrooms. In the mid-1990s, the building was being used as a drug-testing facility.
1135-NA	Office	100	100-NR-1	214.5 m^2	Removed	1980s	Not Recorded	1135-NA was one of several mobile offices that were installed in 100-N in the 1980s. It consisted of two sheet-metal and plywood trailers on I-beam trailer frames. The building was connected to the 124-N-8 Sewer System and was attached to 1135-N. The Mobile Offices were located south of N Avenue, north of Turbine Lane, and about 425 m (1,394 ft) southeast of the 105-N Reactor. 1135-NA was centered at the coordinates (571588.859, 149146.797). The 1135-NA Building was excessed in the late 1990s, and was eventually auctioned off to a private company and removed from the site (Cor11052007). As was the case with most of the mobile trailer buildings on the Hanford Site, the primary purpose of 1135-NA was to provide office space. Along with 1135-N, the building housed 11 offices, a kitchen, and restrooms. In the mid-1990s, the building was being used as a drug-testing facility.
1137-N	Office	100	100-NR-1	195.5 m^2	Removed	1980s	Not Recorded	1137-N consisted of two sheet-metal and plywood trailers on I-beam trailer frames. The 1137-N Building provided office space for Hanford Patrol personnel.
1140-N	Change House	100	100-NR-1	13.9 m^2	Removed	Not Recorded	Not Recorded	The 1140-N Facility was a single-wide mobile office facility and was used as a restroom facility in 100-N.
1141-N	Change House	100	100-NR-1	22.3 m^2	Removed	Not Recorded	Not Recorded	The 1141-N Facility was a single-wide mobile office facility in 100-N and was used as a restroom facility in 100-N.
1142-N	Office	100	100-NR-1	62.4 m^2	Removed	Not Recorded	Not Recorded	The 1142-N Building was a single-wide mobile office facility. This facility likely housed the equipment necessary to support the telephone system in 100-N.
1143-N	Maintenance Shop	100	100-NR-1	29.3 × 27.4 (Overall site dimensions)	Active	1985	Not Recorded	The 1143-N Carpenter/Paint Shop is a one-story, pre-engineered, metal building. The north half of the building was used as a carpenter shop and the south half as a paint shop. The paint shop area was converted to a heavy equipment mechanics shop in the mid-1990s. A work site IH baseline survey of 1143-N conducted in April 2004 noted that the solvent (Safety-Kleen 105 Solvent Recycled) used in a parts cleaner was replaced with a "new" solvent, Safety-Kleen Premium Solvent, as it did not contain tetrachloroethylene (CAS 127-18-4). Other potential IH chemical hazards identified in the baseline included oils, lubricants, greases, petrols (gasoline, diesel), solvents, spray paints, adhesives, grinding wheels, and welding rods.

Table A-1. Summary of 100-N Facilities

Facility Code	Facility Type	Area	Operable Unit	Site Dimensions (m)	Facility Status	Construction Date	Demolition/ Removal/ Cocooned Date	Facility Description
1143-NA	Storage	100	100-NR-1	111.5 m^2	Removed	1976	Not Recorded	The 1143-NA Facility was a modular office trailer facility in 100-N. Originally, this facility was MO-312, which was a single-wide trailer and appears to have been present in the mid-1980s. By 1987, a double-wide trailer had replaced the original facility. This new facility was known as MO-389 (049562). The MO-389 building was excessed circa 1999 (BHI-00981). The 1143-NA Building was used to store a variety of products for general maintenance and equipment repair.
1143-NB	Storage	100	100-NR-1	46.5 m^2	Removed	1980s	Not Recorded	1143-NB was a single-wide sheet-metal and plywood trailer facility. The 1143-NB Facility was used for maintenance storage in 100-N. It was used to store supplies associated with the 1143-N Shop Building.
1143-NC	Storage	100	100-NR-1	27.9 m^2	Removed	1980s	Not Recorded	1143-NC was a single-wide sheet-metal and plywood trailer facility. The 1143-NC Facility was used for storage in 100-N. It was used to store paint and other supplies associated with the 1143-N Shop Building.
1144-N	Maintenance Shop	100	100-NR-1	124.9 m^2	Removed	1977	Not Recorded	1144-N was a double-wide sheet-metal and plywood trailer facility. The 1144-N Facility served as a maintenance building for SAS personnel in 100-N. It contained space for four offices along with a larger work area; it later served as a print shop, and after that, it may have been used to house personnel from the Sandia National Laboratory.
1145-N	Office	100	100-NR-1	124.9 m^2 (Dimensions are for the second 1145-N)	Removed	Not Recorded	Not Recorded	The 1145-N Facility was first a single-wide change trailer, which was located southwest of the 1104-N Building. Two small restroom trailers were associated with this facility (1145-NA and 1145-NB). By 1987, this original facility had been removed and replaced by a double-wide facility, which contained restrooms and 11 offices. The first 1145-N Facility appears to have been used as a change house by maintenance personnel in 100-N. The second 1145-N Facility provided office space. It was connected to the 124-N-7 Septic Tank.
1145-NA	Change House	100	100-NR-1	Not Specified	Removed	Not Recorded	Not Recorded	The 1145-NA Facility was a small, single-wide restroom trailer in 100-N. 1145-NA provided restrooms for maintenance workers.
1145-NB	Restroom Trailer	100	100-NR-1	Not Specified	Removed	Not Recorded	Not Recorded	The 1145-NB Facility was a small, single-wide restroom trailer in 100-N. 1145-NB provided restrooms for maintenance workers. The 1145-NB Facility, assuming it can be identified as the MO-397 structure present during the 1990s was likely removed circa 1999 at the same time as many of the other trailers in the immediate vicinity.
1146-N	Office	100	100-NR-1	124.9 m^2	Removed	1982	Not Recorded	1146-N was a double-wide sheet-metal and plywood trailer facility. The 1146-N Facility was used as a training facility, containing a large classroom, along with restrooms. According to BHI-00627, it was later used by as an HPT trailer.
1147-N	Office	100	100-NR-1	156.1 m^2	Removed	1980	Not Recorded	1147-N was a double-wide sheet-metal and plywood trailer facility. The 1147-N Facility was used as a training facility, containing a large classroom along with restrooms.
1148-N	Change House	100	100-NR-1	171.7 m^2	Removed	Not Recorded	Not Recorded	1148-N was a double-wide sheet-metal and plywood trailer facility and contained a restroom, kitchen, and three offices. The 1148-N Building was used as a change house by Facilities Maintenance personnel. It also had kitchen facilities and served as a lunchroom.
1149-N	Office	100	100-NR-1	124.9 m^2	Removed	1980s	Not Recorded	1149-N was a double-wide sheet-metal and plywood trailer facility and contained space for 10 offices. The 1149-N Facility was used to house offices for administrative personnel in 100-N.
1150-N	Office	100	100-NR-1	124.9 m^2	Removed	1980s	Not Recorded	1150-N was a double-wide sheet-metal and plywood trailer facility and contained space for 10 offices. The 1150-N Facility was used to house offices for administrative personnel in 100-N.

Table A-1. Summary of 100-N Facilities

Facility Code	Facility Type	Area	Operable Unit	Site Dimensions (m)	Facility Status	Construction Date	Demolition/ Removal/ Cocooned Date	Facility Description
1151-N	Office	100	100-NR-1	147.2 m^2	Removed	1980s	Not Recorded	1151-N was a double-wide sheet-metal and plywood trailer facility and contained space for 10 offices. The 1151-N Facility was used to house offices for administrative personnel in 100-N.
1152-N	Office	100	100-NR-1	147.2 m^2	Removed	1980s	Not Recorded	1152-N was a double-wide sheet-metal and plywood trailer facility and contained a kitchen, restrooms, and six offices. The 1152-N Facility was used to house offices for administrative personnel in 100-N.
1153-N	Office	100	100-NR-1	147.2 m^2	Removed	1977	Not Recorded	1153-N was a double-wide sheet-metal and plywood trailer facility and contained a kitchen, restrooms, and 10 offices. The 1153-N Facility was used to house offices for D&D personnel in 100-N.
1154-N	Office	100	100-NR-1	124.9 m^2	Removed	1980s	Not Recorded	1154-N was a double-wide sheet-metal and plywood trailer facility and contained 10 offices. The 1154-N Facility was used to house offices for administrative personnel in 100-N.
1155-N	Office	100	100-NR-1	7.3 × 20.1	Removed	1980s	Not Recorded	1155-N consisted of two sheet-metal and plywood trailers on I-beam trailer frames. The 1155-N Building was used to provide 10 offices for administrative personnel in 100-N.
1156-N	Office	100	100-NR-1	145.7 m^2	Removed	1980s	Not Recorded	1156-N was a double-wide sheet-metal and plywood trailer facility and contained 12 offices. The 1156-N Facility was used to house offices for administrative personnel in 100-N.
1157-N	Maintenance Shop	100	100-NR-1	111.5 m^2	Removed	Not Recorded	Not Recorded	A physical description of this facility is not available. The location of this facility could not be determined. There is no evidence that this facility ever existed. If it did, it may have been quickly replaced and renumbered, probably within the 1984 through 1987 timeframe. The 1157-N Facility provided a shop area for facilities maintenance personnel. It also included a single office.
1157-NA	Storage	100	100-NR-1	3.0 × 7.3	Removed	Not Recorded	Not Recorded	The 1157-NA Facility was a single-wide trailer facility in 100-N. The MO-375 Facility was used as a storage facility. It may have been associated with the 1143-N Shop Facilities, although the location of this facility could not be determined.
1158-N	Office	100	100-NR-1	147.2 m^2	Demolished	1978	Not Recorded	1158-N was a double-wide sheet-metal and plywood trailer facility and contained 10 offices. The 1158-N Facility was used to provide office space for training personnel in 100-N. It later provided office space in support of the nearby EAL facilities.
1158-NA	Laboratory	100	100-NR-1	85.8 m^2	Demolished	1993	2008	1158-NA was a single-wide sheet-metal and plywood trailer facility and was connected to MO-426 through an enclosed wooden breezeway. On December 15, 1999, the diesel-powered air compressor associated with the facility was found to be leaking. An estimated 8 to 11 L (2 to 3 gal) of diesel fuel was released into the soil. The contaminated soil was to be removed (0519796). The 1158-NA Facility was originally designed to be the EAL. EAL capabilities included VOAs by GC/MS, metals by ICP, anions by IC, Cr(VI), TOC/TIC, pH, conductivity, gross alpha/beta, gamma spectroscopy, and alpha energy analysis. The EAL was closed in 1996 and has since been used by the IH organization to calibrate and repair their instruments. MO-425 was used to house the analytical laboratory itself.
1158-NB	Storage	100	100-NR-1	85.8 m^2	Active	1993	Not Recorded	MO-426 was a single-wide sheet-metal and plywood trailer facility and was connected to MO-425 through an enclosed wooden breezeway. Although it was a separate MO structure, it was often combined with MO-425 and referred to as part of 1158-NA. The 1158-NA Facility was originally designed to be the EAL. EAL capabilities included VOAs by GC/MS, metals by ICP, anions by IC, Cr(VI), TOC/TIC, pH, conductivity, gross alpha/beta, gamma spectroscopy, and alpha energy analysis. The EAL was closed in 1996 and has since been used by the industrial hygiene organization to calibrate and repair their instruments. MO-426 was used as a sample receiving and preparation facility.

Table A-1. Summary of 100-N Facilities

Facility Code	Facility Type	Area	Operable Unit	Site Dimensions (m)	Facility Status	Construction Date	Demolition/ Removal/ Cocooned Date	Facility Description
1158-NC	Change House	100	100-NR-1	39.0 m^2	Active	1993	Not Recorded	1158-NC was a single-wide sheet-metal and plywood trailer facility. The MO-427 Facility was used as a change room and break room in support of the EAL.
1159-N	Office	100	100-NR-1	46.5 m^2	Removed	1980s	Not Recorded	1159-N was a single-wide sheet-metal and plywood trailer facility. A new RCL (MO-870, installed in 2007) now occupies the same spot. The 1159-N Facility was used to provide office space for construction services personnel in 100-N.
1160-N	Office	100	100-NR-1	116.1 m^2	Removed	1980s	Not Recorded	1160-N was a double-wide sheet-metal and plywood trailer facility. The 1160-N Facility was used to provide office space for construction services personnel in 100-N.
1161-N	Office	100	100-NR-1	110.1 m^2	Removed	1980s	Not Recorded	1161-N was a double-wide sheet-metal and plywood trailer facility. The 1161-N Facility was used to provide office space for construction services personnel in 100-N.
1162-N	Office	100	100-NR-1	125.0 m^2	Removed	1980s	Not Recorded	1162-N was a double-wide sheet-metal and plywood trailer facility. The 1162-N Facility was used to provide office space for construction services personnel in 100-N.
1163-N	Office	100	100-NR-1	170.0 m^2	Removed	1980s	Not Recorded	1163-N was a double-wide sheet-metal and plywood trailer facility. The 1163-N Facility was used to provide office space for construction services personnel in 100-N.
116-N	Stack	100	100-NR-1	61.3 (h) × 7.2 (dia.) (Diameter listed is the diameter at the base; at the top it measures 4.6 m [15 ft] in diameter)	Inactive	1962	Not Recorded	The 116-N Reactor Stack is a circular ventilation stack set into a steel reinforced-concrete octagonal base The 116-N Reactor Stack was constructed in 1962 and served an essential function in the 105-N Ventilation System, designed to prevent the spread of radioactive contamination. 105-N had five ventilation zones. Air exhausted from Zone 1 (primary radiation area), Zone 2 (secondary radiation area), and Zone 3 (normal access areas; metal preparation, storage basin, and transfer area) was routed through a HEPA filter system located in the 117-N Filter Building and discharged to the atmosphere from the 116-N Stack. In 1989, the year the N Reactor was permanently shutdown, the 116-N Stack operated at an average flow rate of 5,946 m^3/min (210,000 ft^3/min) and released 6.7 × 10-4 Ci. The isotopes released were Co-60, Sr-90, Cs-137, Pu-238, Pu-239, and Pu-240. There may be a drain in the bottom of the stack that drains to a French drain about 12 m (40 ft) east of the center of the stack (H-1-28400). A steel staircase that was located on the east side of the stack to allow access to stack monitoring equipment was removed during demolition of the 119-N and 119-NA Buildings in 2006 (CCN 128270). The stack was demolished with explosives in 2008. The below grade portion remains to be demolished.
117-N	Process Unit/Plant	100	100-NR-1	36.6 × 22.9 (Overall site dimensions for both buildings)	Inactive	1963	Not Recorded	The 117-N Exhaust Air Filter House housed HEPA filters and activated charcoal filters. The building is below ground except for a removable steel roof. As of March 2008, the 117-N is in the process of being demolished. The 117-NVH Valve Control House is a small pre-engineered metal building. The 117-NVH Facility supported the 117-N Exhaust Air Filter facility, in that it housed instrumentation and controls for filter sprays in filter cells A, B, and D in case of heat indication (CCN 127193).The 117-NVH is deactivated awaiting demolition. The filters have been removed from the facility.
117-NVH	Valve Pit	100	100-NR-1	3.96 × 5.33	Inactive	1967	Not Recorded	The 117-NVH Valve Control House is a small pre-engineered metal building. The 117-NVH facility supported the 117-N Exhaust Air Filter facility in that it housed instrumentation and controls for filter sprays in filter cells A, B, and D in case of heat indication. The 117-NVH is deactivated awaiting demolition as of October 2009.

Table A-1. Summary of 100-N Facilities

Facility Code	Facility Type	Area	Operable Unit	Site Dimensions (m)	Facility Status	Construction Date	Demolition/ Removal/ Cocooned Date	Facility Description
119-N	Laboratory	100	100-NR-1	1.8 × 2.1 (119-N) 3.6 × 3.7 (119-NA)	Demolished	1976	2006	The 119-N Exhaust Air Monitoring Building housed equipment used to sample/monitor the exhaust from the 116-N Stack. The 119-NA Continuous Airborne Effluent Monitoring Building housed equipment used to sample/monitor the air exhausted from 116-N Stack. The 116-N Stack was provided with a continuous sampling system. All the sampling equipment was located in the 119-N and 119-NA Buildings.
119-NA	Laboratory	100-N	100-NR-1	3.66 × 3.66	Demolished	1984	2006	The 119-NA Continuous Airborne Effluent Monitoring Building housed equipment used to sample/monitor the air exhausted from 116-N stack. The 116-N stack was provided with a continuous sampling system. All the sampling equipment was located in the 119-N and 119-NA buildings.
11-N	Storage	100	100-NR-1	9.1 × 5.5	Demolished	1963	2004	The facility was a portable, one-story, pre-engineered, wood-frame building with metal trusses and corrugated sheet-metal siding and roof. It sat on wooden skids. It was originally used as a storage building and later used as a change facility for entry into the 1310-N and 1322-N Facilities (CCN 113663).
1300-N	Retention Basin	100	100-NR-1	24.4 × 39.6 × 4.6	Demolished	1963	2004	The 1300-N EDB was a concrete storage basin with a 0.48 cm (3/16 in.) carbon steel liner. The EDB is also WIDS 116-N-4. The basin originally served as a quenching pool for reactor blowdown in the event of a primary coolant leak. In the late 1960s, the basin was determined to be of insufficient size for its original use and was replaced by the 1304-N EDT. From 1973 until 1987, the EDB received low levels of radioactive contaminated liquid effluent generated during periodic blow down of the steam generators and leaking isolation valves (primary and secondary coolant leaks). Water levels were maintained in the 1300-N to keep the bottom layer of contaminated sediment from being exposed (BHI-00540, BHI-00731). Water and sediment were removed from the 1304-N EDB in 1997 and a protective polypropylene liner installed to control spread of contamination. In 2004, the facility was demolished except for the north, east, and short portion of the south walls. Remaining structure and underlying soils were deferred to Remedial Action. The primary isotopes of interest during demolition of the basin were Co-60, Cs-137, Eu-154, Eu-155, Sr-90/Y-90, Ni-63, Pu-241, Pu-239/240, and Am-241.
1301-N	Crib	100	100-NR-1	88.4 × 38 × 3.7	Demolished	1964	Not Recorded	This structure is also known as WIDS 116-N-1. 1301-N is the zig-zag crib/trench at 100-N. The crib and trench received radiologically contaminated water from the 105-N Reactor Basin Floor Drains and the 109-N Floor Drains. The effluent contained activation and fission products as well as small quantities of corrosive liquids and laboratory chemicals. At times, the effluent consisted of water from the primary reactor coolant system, the periphery reactor cooling system and decontamination wastes from these systems. The crib is a rectangular basin 88 m (290 ft) long by 38 m (125ft) wide × 3 m (12 ft) deep. The walls of the crib are sloped soil and gravel embankment. Its bottom was filled with a 1 m (3ft) layer of large stones. Early in 1981, a layer of additional rock was added to the area surrounding the weir box. The added rock was necessary for contamination control purposes. The added cover was 30 to 60 cm (12 to 24 in.) deep using cobbles sized from 30 to 60 cm (12 to 24 in.) (WHC-SD-EN-TI-251).

Table A-1. Summary of 100-N Facilities

Facility Code	Facility Type	Area	Operable Unit	Site Dimensions (m)	Facility Status	Construction Date	Demolition/ Removal/ Cocooned Date	Facility Description
1303-N	Silo	100	100-NR-1	49.1 × 11.0	Inactive	1963	Not Recorded	The 1303-N Spacer Silos are three buried spacer silos covered and surrounded with an earth berm, with a 30.5 m (100 ft) reinforced-concrete retaining wall along the west side (CCN 125295). When 100-N was operating, the silos received radioactive metal fuel spacers for temporary storage. The spacers were transferred from the fuel storage basin to the silos by placing a spacer in a 7.6 cm (3 in.) spacer transfer line and then pushing it forward with the next spacer. N Basin water was used to dislodge spacers that became stuck in the transfer line. Non-contaminated water was sprayed into the silos in 1984 to prevent airborne contamination during the removal of spacers. However, it was decided the water spraying could potentially wash contamination into the soil and was discontinued. Paint was used instead of water spray to control contamination. When a silo was completely full, the spacers were removed and shipped to the 200 Area burial grounds for permanent disposal. The primary radionuclide associated with the 1303-N Spacer Silos is Co-60. Cs-137, iron-59, and Mn-54 were also associated with the spacers and may be present in the silos. Radionuclides associated with 100-N Basin water (primarily Cs-137, Sr-90, tritium, and potentially Pu-239/240) may also be present in the silos. All spacers were removed from the silos in 1995 and inspected with video cameras to confirm they were empty. The videos showed there could be an accumulation of several inches of paint in the bottom of Silos 2 and 3 (CCN 125295). In 1996, contamination was found outside the chain-link fence surrounding the site. The site was interim stabilized by pushing the chain-link fence and posts into the contaminated area surrounding the silos and covering the entire contaminated area with 15.2 cm (6 in.) of crushed rock. The site was down posted to a URM area.
1304-N	Storage Tank	100	100-NR-1	26.8 × 18.9 (Overall site dimensions) 19.2024 (1304-N EDT)	Demolished	1970	2004	The 1304-N EDT was an insulated, dome-topped, steel tank on a reinforced-concrete foundation and was designed to contain the entire volume of the N Reactor primary coolant system. The EDT was maintained 0ne-half full of water so it could act as a quenching system for steam released during a reactor emergency. It was drained in 1989 and never refilled. In 1995, debris and pipe were removed from inside the tank to reduce "sky shine" (BHI-00606). The tank and foundation were demolished in 2004.
1310-N	Process Unit/Plant	100	100-NR-1	79.9 × 100.0 (Overall site dimensions) 18.9 (dia.) (1310-N spherical tank) 7.3 (dia.) (1310-N pump house silo)	Inactive	1963	Not Recorded	The 1310-N Radioactive Liquid Waste Treatment Facility consists of the 1310-N Spherical Tank (referred to as the "golf ball"), 1310-N Pump House Silo, and adjoining earth berm. The 1310-N Chemical Waste Storage Facility provided storage and treatment capability for contaminated liquid wastes generated at the N Reactor Facility. The lower portion of the golf ball tank is located underground. The entire tank is nearly surrounded by the earth berm that acted as a radiological shield. The pump house silo is a reinforced-concrete structure, partially buried below the ground surface (DOE/RL-2004-15). The 1310-N Facility was deactivated in 1997. Deactivation included removal of residual liquids in the spherical tank, liquid, and sediment in the silo were sampled and removed, and residual liquid in the piping was also removed. The radioactive material remaining is residual surface contamination in the facility. Substantial radioactive decay has occurred at the facility since it has been deactivated.
1312-N	Retention Basin	100	100-NR-1	156.4 × 80.5 × 8.0	Demolished	1987	2007	The 1312-N Facility was constructed as a part of the post-Chernobyl safety upgrades to N Reactor (N Reactor Accelerated Safety Enhancement Program). It was designed to retain reactor coolant and other contaminated water in the event of a loss of emergency coolant accident scenario. The 105-N Reactor never experienced an emergency coolant accident and therefore the 1312-N LERF was never used.

Table A-1. Summary of 100-N Facilities

Facility Code	Facility Type	Area	Operable Unit	Site Dimensions (m)	Facility Status	Construction Date	Demolition/ Removal/ Cocooned Date	Facility Description
1313-N	Office	100	100-NR-1	3.6 × 3.7	Demolished	1978	2006	The 1313-N Change Control Building was a pre-engineered metal-frame building supported on a reinforced-concrete slab foundation (CCN 132235). The 1313-N Change Control Building was adjacent to 1314-N and was used to control the transfer of liquid waste, by remote valving, from the 107-N Recirculation Cooling Building to the 1310-N Chemical Waste Storage Facility or to rail tank cars for shipment. It also provided a change room for radiological-zone work in the nearby 1314-N Facility and was later used as a storage area for radioactive-contamination protection clothing.
1314-N	Office	100	100-NR-1	9.1 × 18.3	Demolished	1978	2007	The 1314-N Liquid Waste Loadout Station contained rail tank car loading equipment consisting of valving, pumps, underground and overhead piping, a 3,800 L (1,000 gal) transfer tank and a 757 L (200 gal) catch tank WHC-SD-EN-TI-251) and was designed to transfer liquid wastes into specially designed rail cars for transportation to the 200 Area for processing and disposal. The 1314-N Facility also received liquid waste from the 107-N Building. The facility contained a tank car washdown station with a sump to collect wash water. The wash water drained into a 3,800 L (1,004 gal) tank identified as the Overflow Tank. During the filling operation, excess liquid waste was designed to overflow through a closed piping system from the tank car to the Overflow Tank, which initiated delivery pump shutdown. A 757 L (200 gal) tank identified as the catch tank was installed to hold liquids that exceeded the capacity of the tank car wash sump (H-1-37675). The 1314-N Site was known to have extensive radiological soil contamination and suspected subsoil petroleum contamination from a nearby upgradient pipe leak near 1715-N.
1315-N	Process Unit/Plant	100	100-NR-1	2.7 × 4.6	Demolished	1977	2006	The 1315-N Reactor Effluent Diversion System Valve House was a 12.5 m^2 (135 ft^2) pre-engineered metal building. 1315-N was used as a valving station that regulated discharge to the cribs or shallow disposal basin. Isotopes of concern from wastes generated during deactivation were Co-60, Cs-137, U-235, U-238, and Sr-90.
1316-N	Process Unit/Plant	100	100-NR-1	2.44 × 4.57	Demolished	Not Recorded	2006	1316-N was used as a valving station for reactor effluent discharge to the shallow disposal basin. It was a pre-engineered metal building over a below-grade concrete valve pit.
1316-NA	Process Unit/Plant	100	100-NR-1	3.66 × 3.66	Demolished	Not Recorded	2006	1316-NA provided a housing for the valve station, which directed water discharge to either the 116-N-1 or 116-N-3 Cribs.
1316-NB	Process Unit/Plant	100	100-NR-1	3.05 × 3.35	Demolished	1984	2006	1316-NB housed a magnetic flow meter, in a reinforced concrete valve pit.
1316-NC	Process Unit/Plant	100	100-NR-1	1.52 × 1.52	Demolished	Not Recorded	2006	1316-NC Turbine Meter/Standpipe was a reinforced concrete basin with a vertical standpipe that housed a turbine meter.
1317-N	Process Unit/Plant	100	100-NR-1	1.52 × 1.52	Demolished	Not Recorded	1987	The structure appears to have been a wood and sheet-metal weather enclosure over a valve pit for the export water line. The above grade structure was gone by 1987.
1322-N	Process Unit/Plant	100	100-NR-1	8.2 × 7.9 × 7.5 28 × 21 9 × 5 4.3 × 1.8	Inactive	1964	Not Recorded	1322-N was used to divert effluent waste from the reactor plant to the crib or the chemical waste tank. 1322-NA Building contained the liquid effluent waste treatment facility pilot plant. At one time, it was used for pilot testing IX columns for the 107-N Facility. 1322-NB was used as a station for valving and sampling functions. 1322-NC was used for sampling and analysis of the effluent prior to entering the disposal crib.

Table A-1. Summary of 100-N Facilities

Facility Code	Facility Type	Area	Operable Unit	Site Dimensions (m)	Facility Status	Construction Date	Demolition/ Removal/ Cocooned Date	Facility Description
1323-N	Process Unit/Plant	100	100-NR-1	1.8 m × 1.8 m	Inactive	Not Recorded	Not Recorded	The 1323-N Structure was the sampling station for the N8 Wells, a series of wells installed to monitor the N Springs. The wells were both groundwater monitoring and piezometers.1323-N was a 1.8 × 1.8 m (6 × 6 ft) metal shed with a corrugated metal roof that sat on the bank of the Columbia River about 15 m (50 ft) from the water.
1325-N	Process Unit/Plant	100	100-NR-1	28.04 × 21.03 76.2 × 73.1 915 × 16.7 × 2.1	Demolished	1983	2001	The 1325-N Crib (WIDS 116-N-3) was designed for the disposal of liquid waste percolation through the soil column. It was built to replace the 1302-N Crib (WIDS 116-N-1) and first received N Reactor effluent in 1983. The 116-N-3 Trench was put into service in September 1985 to provide additional disposal capacity. Effluent reportedly never overflowed the first earthen dam in the trench. The crib has not received waste since February 1987 and was closed under interim status. It has been demolished and remediated by FR. It is also known as WIDS 116-N-3.
1327-N	Process Unit/Plant	100	100-NR-1	9.14 × 7.32	Demolished	Not Recorded	2006	1327-N Diversion Valve House was a pre-engineered metal building and was designed to divert liquid effluent into 1312-N LERF in the event of an emergency.
1330-N	Storage	100	100-NR-1	45.72 × 18.29	Demolished	1983	2008	The 1330-N Waste Storage Facility was a curbed and fenced concrete pad. The facility was used to store and package waste for disposal. The pad was covered by an open metal shed made of structural steel and sheet-metal installed over the pad in the late 1980s that was divided into three storage areas each with its own locked gate.
1331-N	Storage	100	100-NR-1	1.83 × 3.96	Demolished	1982	2006	The 1331-N Facility was a small metal framed and corrugated metal sheathed shelter. It consisted of a rack where drummed liquids could be held in a horizontal position with a metal pan to contain any spills.
1332-N	Storage	100	100-NR-1	12.19 × 2.44	Demolished	Not Recorded	2006	The 1332-N Gas Bottle Storage was a covered bottle storage area constructed of structural steel with a pan deck floor, corrugated steel roofing, concrete block, and steel-plate dividers. The facility was used to store bottles of compressed gas.
13-N	Storage	100	100-NR-1	6.1 × 12.2	Demolished	1963	2004	The 13-N was a portable, rectangular, one-story, wood-frame building with corrugated sheet-metal exterior wall surfaces and gable roof. It sat on concrete blocks surrounded by a plywood skirting. The interior was a single room, the walls were wood and sheetrock. No underground lines associated with 13-N, Sheet 43. The 13-N Facility was a portable building brought to the site during construction of the N Area. It served as a storage area for pipe fitters working at 100-N and supported work activities related to reactor outages.
1510-N	Office	100	100-NR-1	18.29 × 7.32	Removed	1982	Not Recorded	The 1510-N (N-10) Crafts Lunchroom was a double-wide mobile office trailer building and used as a lunchroom for craft workers in the Kaiser Shop Area.
1512-N	Office	100	100-NR-1	18.29 × 7.32	Removed	1982	Not Recorded	The 1512-N (N-12) Facility was a mobile office trailer building and used to house offices/lunchroom for subcontractors.
1513-N	Storage	100	100-NR-1	18.29 × 7.32	Removed	1982	Not Recorded	The 1513-N Building was used for storing materials related to the 1519-N Pipefitters Shop. A 90-day hazardous waste storage pad was located on the north side of the building.
1514-N	Office	100	100-NR-1	18.3 × 7.3	Removed	1982	Not Recorded	The 1514-N (N-14) Facility was a mobile office trailer building. It was part of a cluster of subcontractor buildings, also known as the Kaiser Shop Area that consisted of a combination of office trailers and metal Butler style buildings. Most were placed at 100-N in 1982 in support of N Reactor upgrades. The 1514-N Building was used to house offices for subcontractors.
1515-N	Maintenance Shop	100	100-NR-1	24.38 × 14.63	Demolished	1982	2006	The 1515-N (N-15) Facility was used as a metal shop, where materials associated with fabricating small metal structures occurred. In addition to the shop floor, there were bathroom facilities and an ice house where containers of drinking water for site construction projects were prepared.

Table A-1. Summary of 100-N Facilities

Facility Code	Facility Type	Area	Operable Unit	Site Dimensions (m)	Facility Status	Construction Date	Demolition/ Removal/ Cocooned Date	Facility Description
1516-N	Maintenance Shop	100	100-NR-1	6.1 × 11.28	Demolished	1982	2006	The 1516-N (N-16) Facility was a carpenters shop, where the normal activities and materials associated with fabricating small wooden structures occurred.
1517-N	Maintenance Shop	100	100-NR-1	10.97 × 12.5	Demolished	1982	2006	The 1517-N Facility was actually two buildings that shared a common wall. There was an attached storage structure constructed of scaffolding and plywood sheathing. An apparent drum pad was located to the south of this facility. To the north and west of this facility was an extensive area of discarded sand blasting grit. The facility was used for painting. At one time, one part of the facility was used to store respiratory protection equipment.
1518-N	Maintenance Shop	100	100-NR-1	6.4 × 12.5	Demolished	1982	2006	The 1518-N Building was apparently used in support of electricians and, at one time, the crushing of electric light bulbs.
1519-N	Maintenance Shop	100	100-NR-1	6.4 × 12.5	Demolished	1982	2006	This facility was apparently used in support of pipe fitters.
151-N	Electrical Substation	100	100-NR-1	17.07 × 13.11	Demolished	1963	2006	The 151-N was an electrical substation that converted 230-kV input, from the BPA power grid, to 13.8-kV output during initial startup and, as necessary, until the N Reactor could provide its own electrical power via the turbine-generator in the 184-N Powerhouse. The 13.8-kV supplied the "A" electrical bus for all 100-N facilities. Instruments and controls for operation and monitoring the substation and transformers were located within the 151-N Building.
1520-N	Storage	100	100-NR-1	18.29 × 3.66	Removed	1982	Not Recorded	The 1520-N Building was used as a storage area for electrical equipment used by the various subcontractors in the Kaiser Shop Area.
1521-N	Storage	100	100-NR-1	18.29 × 3.66	Removed	1982	Not Recorded	The 1521-N Building was a mobile office trailer, and was used as a storage building in the Kaiser Shop Area.
1522-N	Office	100	100-NR-1	18.29 × 3.66 × 0	Removed	1982	Not Recorded	The 1522-N Building was a mobile office trailer and was used as an office facility in the Kaiser Shop Area.
1523-N	Office	100	100-NR-1	18.29 × 3.66	Removed	1982	Not Recorded	The 1523-N Building was a mobile office trailer and was used to house offices and a lunchroom for workers in the Kaiser Shop Area.
1524-N	Storage	100	100-NR-1	24.38 × 24.38	Demolished	1985	2008	The 1524-N Facility was used to store drums and other containers of waste materials until 1989. During the 100-N deactivation period, it was used for the storage of radioactive materials including shipping casks and shielded containers.
1525-N	Storage	100	100-NR-1	18.29 × 12.19	Demolished	Not Recorded	2008	The 1525-N was a fenced laydown yard to prevent unauthorized removal of materials stored in the area. The facility was used for storing construction materials, and no contamination events are known to have occurred.
1526-N	Storage	100	100-NR-1	18.29 × 12.19	Removed	Not Recorded	Not Recorded	The 1526-N (N-26) Craft Shop was a single-wide mobile office (trailer) used by the crafts.
153-N	Electrical Substation	100	100-NR-1	24.08 × 17.07	Demolished	1963	2006	The 153-N Switch Gear Building was a rectangular, one-story, concrete-block structure with a basement and a flat concrete roof with gravel over four-ply built-up roofing. The 153-N Switch Gear Building was the location of the second source of plant power. The basement was primarily a cable spreading room.
155-N	Electrical Substation	100	100-NR-1	304.8 × 172.21	Active	1966	Not Recorded	The HGP produced electricity for the BPA grid using steam from the N Reactor operation. The 155-N Export Power Switchyard distributed the power to the grid. The 155-N Export Power Switchyard is a rectangular, fenced gravel area that contains a control house, a microwave tower, and a switchyard. The HGP operated from April 1966 to December 1986. As of August 2008, the Export Power Switchyard is still active.

Table A-1. Summary of 100-N Facilities

Facility Code	Facility Type	Area	Operable Unit	Site Dimensions (m)	Facility Status	Construction Date	Demolition/ Removal/ Cocooned Date	Facility Description
1605-NE	Control Structure	100	100-NR-1	6 m^2	Inactive	1987	Not Recorded	The 1605-NE East Observation Post was an approximately 6 m^2 (64 ft^2) pre-engineered, steel-framed structure with steel siding located on the roof of the 105-N Reactor Facility.
1614-N	Monitoring Station	100	100-NR-1	2.44 × 2.44	Demolished	Not Recorded	Not Recorded	The 1614-N Environmental Monitoring Station was a small concrete block building with a concrete floor and a flat wood roof with four-ply built-up roofing material. The footer for the building was 0.6 m (2 ft) below grade. No information could be found on type of monitoring equipment or processes in the facility.
163-N	Process Unit/Plant	100	100-NR-1	31.09 × 32.92	Demolished	1963	2007	The 163-N Demineralization Plant, completed in September 1963, was an L-shaped, one-story, highbay, metal frame building with a poured concrete foundation and corrugated metal exterior siding and flat roof. The 163-N Facility produced high-quality, demineralized makeup water for the 100-N Reactor. The 163-N Facility was deactivated in 1995 and demolished in 2007.
166-N	Storage	100	100-NR-1	66.3 m^2	Demolished	1964	2006	The 166-N Fuel Oil Storage Pump House was a reinforced-concrete support structure with a masonry fill-in on a poured concrete foundation. The building was one-story above ground and included a basement. A 5.3 million L (1.4 million gal) fuel oil storage tank and a rail tank car unloading/pumping station was part of the facility. The unloading station was a long, narrow concrete trench containing six tank car and two tank truck unloading stations. A waste oil collection system, designed to collect waste oil from diesel and fuel oil pumping operations plus waste from the diesel oil centrifuge, collected waste oil in a sump in the basement of 166-N Pump House. Waste oil was pumped to an at grade level, waste oil tank located to the south side of 166-N Pump House. A wastewater disposal system collected miscellaneous floor drains and steam condensate wastewater in a sump in 166-N Pump House basement. Wastewater was pumped to a drywell located approximately 2 m (6 ft) from the south wall of the building The drainage from hoses for railroad tank cars or truck unloading was to drywells located on the west side of the unloading stations. There were eight drywells, each composed of buried 76 cm (30 in.) open-ended, concrete pipe designed to hold a 113 L (30 gal) drum. When filled, the drum could be removed and emptied.
1701-N	Office	100	100-NR-1	3.7 × 18.3	Demolished	1979	2006	The 1701-N (MO-992) 100-N Limited Access Area Badge House was a single-wide mobile trailer. The trailer was used by Hanford Patrol to control access to the 100-N Limited Access Area. More recently, it was used as a minor storage facility for fall protection equipment and poster board letters.
1701-NE	Office	100	100-NR-1	3.7x 6.1	Demolished	Not Recorded	Not Recorded	1701-NE was the gatehouse for entry into the Hanford Generating Plant, the area operated by the WPPSS.
1702-N	Office	100	100-NR-1	2.7 × 3.7	Removed	Not Recorded	Not Recorded	1702-N Vehicle Inspection Building controlled the vehicle gate into the 100-N Limited Access Area and was a weather shelter for guards inspecting vehicles entering the area.
1703-N	Office	100	100-NR-1	48.77 × 17.37	Demolished	Not Recorded	Not Recorded	The 1703-N was an irregular shaped, one-story, wood-framed building with a poured concrete foundation, plywood exterior wall surfaces, and a gable roof with an asphalt shingle surface The 1703-N Building was moved to 100-N to be used as storage and offices for 100-N security personnel (HPIF). The building was later used by WPPSS as an office building for engineering and other support personnel.

Table A-1. Summary of 100-N Facilities

Facility Code	Facility Type	Area	Operable Unit	Site Dimensions (m)	Facility Status	Construction Date	Demolition/ Removal/ Cocooned Date	Facility Description
1705-N	Maintenance Shop	100	100-NR-1	39.93 × 6.1	Demolished	1963	2006	The 1705-N Facility was part of the original N Reactor complex to provide space for a variety of operations and support services including a module shop, communication shop, instrument shop, electrical shop, small appliance storage, document storage, conference room, and restrooms. The 1705-NA Facility was either part of the original N Reactor complex or was added about 1964, based on aerial photographs. It was originally used for maintenance work on motors and later as office space.
1705-NA	Maintenance Shop	100	100-NR-1	39.93 × 6.1	Demolished	1964	2006	The 1705-NA facility was either part of the original N Reactor complex or was added about 1964, based on aerial photographs. It was originally used for maintenance work on motors and later as office space.
1706-N	Maintenance Shop	100	100-NR-1	1.52 × 2.74	Demolished	1984	2006	The 1706-N Building was constructed in 1984 to serve as a storage facility for 100-N. Within a few years, it was being used as an electrical motor repair shop. After deactivation and prior to demolition, the building was used for storage of a water truck and trailer for freeze protection. The 1706-NA included a cistern that was used to collect sewer wastes for pumping to a discharge basin. It was isolated in 2002.
1706-NA	Pump Station	100	100-NR-1	Not Recorded	Demolished	1983	2009	The 1706-NA Sewage Lift Station was a below grade concrete structure. The structure extended to a depth of approximately 4 m (13 ft) and contained two pumps. The inlet to the structure from a nearby manhole was a 15 cm (6 in.) PVC pipe, while the outlet was 10 cm (4 in.) galvanized steel. The net change in elevation between the inlet and the outlet was approximately 1 m (3 ft). It was demolished in October 2009.
1707-N	Storage	100	100-NR-1	12.19 × 5.49	Demolished	1984	2006	The 1707-N Patrol Boat House was used to house river patrol craft and associated marine equipment.
1712-N	Maintenance Shop	100	100-NR-1	6.1 × 12.19 × 6.1	Demolished	1962	2004	The 1712-N Insulation Shop was the primary work location for 100-N insulators. The facility held equipment for shaping and cutting insulation for 100-N piping systems and equipment.
1714-N	Storage	100	100-NR-1	12.2 × 24.4	Demolished	1966	2004	The 1714-N Warehouse was initially used for warehousing small tools and parts used at 100-N. Later it was used to store radioactive materials.
1714-NA	Office	100	100-NR-1	24.4 × 15.5	Demolished	1982	2004	The 1714-NA Receiving and Inspection Warehouse was constructed in 1982 to support 100-N receiving and inspection activities. The building housed workstations for receiving and inspection functions.
1714-NB	Storage	100	100-NR-1	7.3 × 12.2	Demolished	1982	2004	The 1714-NB was constructed to provide space for small tools, parts, and equipment for daily use. It was later used for storage of radioactive materials.
1715-N	Storage Tank	100	100-NR-1	65.5 × 22.56 × 2.44 9.1 dia. × 6.1 h	Demolished	1962	2006	The 1715-N DOS Tanks supplied diesel oil to the N Area DOS and IOS systems. The tanks were filled via the 166-N unloading station by transfer pumps located in the 166-N Pump House. The transfer pumps moved the oil to the storage tanks, 184-N Day Tank, or the 181-182-N Day Tank and transfer pumps.
1715-NA	Storage Tank	100	100-NR-1	Not Recorded	Demolished	1969	1991	The 1715-NA facility (aka 182-N-DT-1, 182-N-DT-2, 182-N-DT-3) consisted of three underground fuel oil tanks, each with a nominal capacity of 56,800 L (15,000 gal). Each of the cylindrical tanks had a valve pit located just off the west side of the tank. The 1715-NA Fuel Tanks were used by the emergency backup diesel powered Hi-Lift Pumps, Low-Lift Pumps and the Fog Spray Pumps located in the 182N High Lift Pump House. The 1715-NA day tanks were filled with oil from the 1715-N Diesel Storage Tanks via underground lines from the 166-N Pump House.

Table A-1. Summary of 100-N Facilities

Facility Code	Facility Type	Area	Operable Unit	Site Dimensions (m)	Facility Status	Construction Date	Demolition/ Removal/ Cocooned Date	Facility Description
1716-NA	Maintenance Shop	100	100-NR-1	1.83 × 1.83	Demolished	Not Recorded	1991	The 1716-NA Self-Service Gasoline Station provided 100-N vehicles with gasoline and diesel fuel. The two USTs associated with 1716-NA were 11,356 L (3,000 gal) and 7,571 L (2,000 gal) in size. Both tanks were removed in 1990 and 1991. One of the tanks leaked and soil beneath them was excavated to a depth of 11 m (36 ft) below grade, at which time approval to backfill the excavation was obtained.
1716-NE	Maintenance Shop	100	100-NR-1	10.67 × 17.68	Demolished	Not Recorded	2004	The 1716-NE Maintenance Garage was a one-story, pre-engineered, steel-framed structure with metal siding and flat metal roof, on poured concrete. The garage had four vehicle bays. The Maintenance Garage was used for vehicle maintenance. Floor drains in the facility led to a French drain, WIDS site 100-N-3 (SWMU No. 9). The garage was also a WIDS 100-N-78 (SWMU No. 8).
1722-N	Maintenance Shop	100	100-NR-1	12.19 × 7.62	Inactive	1960s	Not Recorded	The 1722-N Decontamination - Hot Shop Building was a rectangular, pre-engineered, one-story, metal-framed structure with corrugated metal exterior wall and gable roof, on a reinforced-concrete slab. It was added to the 105-N Building in the late 1960s to expand the covered floor space for decontamination work near the fuel storage basin. Historic operations included decontamination of tools and equipment for reactor and fuel storage basin maintenance and as a type of airlock and loading dock between the reactor facility decontamination station and the outside areas west of the reactor building. The building was deactivated in 1998, is currently empty, and will be demolished as part of the ISS work on the 105-N Reactor.
1723-N	Storage	100	100-NR-1	24.4 × 47	Demolished	1981	2006	The 1723-N Warehouse and 1723-NX Laydown Storage yard were used for material receiving, inspection, storage, and shipment in support of N Reactor operations. The warehouse was insulated, had HVAC and fire suppression systems. A 10 cm (4 in.) drainline ran from 1723-N to the valve pit at the 1322-N Facility. Racks were used for storage of materials.
1723-NA	Change House	100	100-NR-1	3 × 14	Demolished	1980	2006	The 1723-NA (MO-913) Trailer was used as a change room (noncontaminated) and restroom for personnel working in 100-N.
1723-NX	Storage	100	100-NR-1	10 × 46	Demolished	Not Recorded	Not Recorded	The 1723-NX Laydown Yard is a flat, gravel-covered, fenced area on the west and southwest sides of the 1723-N Warehouse. The 1723-NX was used as a laydown area. No stains or other signs of spills were observed.
1724-N	Process Unit/Plant	100	100-NR-1	11 × 12.8 17.7 × 12.8 3 × 4 × 2.4	Inactive	1988	Not Recorded	The DOE developed the N Reactor Safety Enhancement Program in response to the accident at Chernobyl in 1986. The hydrogen mitigation system utilized a combination of forced mixing, venting, and post-inerting with nitrogen. In addition to multiple fans and vents, nitrogen vapor would be pumped into the potentially dangerous areas, displacing the oxygen. Without sufficient levels of oxygen in a confined area, an explosion would not occur. 1724-N (Nitrogen Electrical Control) was intended to store and vaporize the nitrogen that would have been used in this system. The system was designed to lower the oxygen level in the confinement areas to less than 5 percent within 3 hours at the maximum flow rate (12,192 m^3/min [40,000 ft^3/min]). Construction began on the 1724-N Nitrogen Electrical Facility in 1988, but was halted when the N Reactor was shut down in 1989. The concrete for the nitrogen tanks, vaporizers, and the electrical vault had been poured. The two nitrogen tanks were delivered and set in place, but never filled, and were later excessed. Underground conduit and lines were laid. An underground vault for fuel oil tanks was never been built. The facility was never energized.
1734-N	Storage	100	100-NR-1	18.29 × 6.4	Demolished	1963	1996	1734-N was completed on October 15, 1963, as part of 100-N Construction Project. It was used as a storage area for compressed gas bottles, primarily nitrogen, oxygen, and helium (BHI-00221).
1802-N	Process Unit/Plant	100	100-NR-1	150 × 10.36 × 16.15	Demolished	1965	2008	The 1802-N Piping Trestle was a structural-steel, braced-frame, pipe-support system, approximately 15.3 m (50 ft) tall. The piping was wrapped with asbestos insulation materials.

Table A-1. Summary of 100-N Facilities

Facility Code	Facility Type	Area	Operable Unit	Site Dimensions (m)	Facility Status	Construction Date	Demolition/ Removal/ Cocooned Date	Facility Description
181-N	Pump Station	100	100-NR-1	18.3 × 3.7 × 3.7 2.1 × 3.6	Demolished	1963	2006	181-N River Water Pump House was designed to supply raw water for 100-N. 181-NA provided housing and protection for security personnel to observe access to 100-N from the river side of the plant. 181-NB, No. 3 diesel was added to provide additional emergency pumping capacity. 181-NC was used to sample river water. It supported water treatment processes at 100-N.
181-NA	Control Structure	100	100-NR-1	3.66 × 3.66 × 18.29	Inactive	1963	Not Recorded	The 181-NA Pump House Guard Tower is a steel framed guard tower 18.3 m (60 ft) high with a 3.7 × 3.7 m (12 × 12 ft) enclosure at the top. The enclosure is made of heavy steel and bullet-resistant glass. There are several gun turrets located around the perimeter of the enclosure just above the floor level.
181-NB	Pump Station	100	100-NR-1	11.89 × 3.05	Inactive	1982	Not Recorded	The 181-NB No. 3 Diesel Enclosure (aka, No. 3 Diesel Pumphouse) is a small, pre-engineered metal building with metal siding and reinforced concrete roof. It is located on the concrete slab of the 181-N River Water Pump House. 181-NB was added to provide additional emergency pumping capacity.
181-NC	Monitoring Station	100	100-NR-1	2.13 × 3.66	Demolished	1982	2006	The 181-NC Sample Shack was constructed of steel siding and plywood, installed on a concrete pad, and had a rectangular footprint measuring 2.1 × 3.6 m (7 × 12 ft). 181-NC was used to sample river water. It supported water treatment processes at 100-N.
181-NE	Pump Station	100	100-NR-1	28.96 × 33.22 × 32.92	Inactive	Not Recorded	Not Recorded	The 181-NE HGP River Pumphouse provided water for the 185-N HGP. 181-NE included conventional trash racks, traveling screens, stop logs for individually isolating screen bays and pump bays, and high-pressure horizontal screen wash nozzles. Debris could be washed from the screens and returned to the river, along with wash water through a common trash trough. 181-NE also contained a diesel engine-powered pump and two backup electric-powered pumps that supplied the HGP fire protection system.
182-N	Pump Station	100	100-NR-1	32 × 31 9.1 × 6.1	Inactive	1963	Not Recorded	The 182-N Facility houses pumps for injecting demineralized water into primary and secondary cooling systems, as well as pumps for supplying makeup and cooling water to the moderator cooling systems located in the 105-N Reactor Building and 109-N Heat Exchanger Building. It also houses diesel emergency water pumps, potable water supply tank, fire supply system, and air compressors.
183-N	Process Unit/Plant	100	100-NR-1	20 × 10 36.5 × 12.1 × 3.6 8.5 × 8.5	Demolished	1963	2007	The 183-N Water Filter Plant housed equipment to provide filtered water to 100-N. The process consisted of pretreatment of the raw water with liquid alum in a chemical mix tank after which it flowed into a settling basin or coagulation basin. After passing through the coagulation basins, the water was filtered and collected in a clearwell, then distributed to the various systems and facilities. The building contained a service bay, a chemical treatment and pipe gallery bay, coagulators and filters, and a coagulator drive bay. The 183-NA is the Pumphouse. The 183-NB is the Clearwell. Several pumps and associated control equipment are mounted on top of the concrete surface. The 183-NC is the Filter Backwash Sump.
183-NA	Pump House	100	100-NR-1	20.12 × 9.14	Demolished	1963	2007	The 183-NA Pump House was a rectangular, one story concrete masonry structure with reinforced concrete panel flat roof and a poured concrete foundation. 183-NA was approximately 6 m (20 ft) to the east of the 183-N Coagulators and measured 20 × 10 m (66 × 33 ft).

Table A-1. Summary of 100-N Facilities

Facility Code	Facility Type	Area	Operable Unit	Site Dimensions (m)	Facility Status	Construction Date	Demolition/ Removal/ Cocooned Date	Facility Description
183-NB	Storage Tank	100	100-NR-1	36.58 × 12.19	Demolished	1963	2007	The 183-NB Clearwell is a buried, rectangular, reinforced concrete structure 36.5 × 12.1 × 3.6 m deep (120 × 40 × 12 ft), with the top surface protruding approximately 0.3 m (1 ft) above grade. Several pumps and associated control equipment are mounted on top of the concrete surface. The foundation included 1.4 m (4.5 ft) deep collection sumps in the bottom of several of the clearwell units.
183-NC	Sump	100	100-NR-1	8.53 × 8.53	Demolished	1977	2007	The 183-NC Filter Backwash Sump was an 8.5 × 8.5 m (28 × 28 ft) box-shaped, reinforced concrete sump with the top surface protruding about 0.9 m (3 ft) above grade. The top surface is diamond plate steel.
183-ND	Process Pit	100	100-NR-1	24.38 × 10.67 × 4.57	Demolished	1963	2007	The 183-ND Resin Disposal Pit (also known as 183-ND Resin Disposal Pit and WIDS site 100-N-23) is located south of the 100-N reactor. The open rectangular pit is approximately 24 m (80 ft) long by 11 m (35ft) wide and 4.6 m (15 ft) deep with a 61 cm (24 in.) drain pipe protruding horizontally from the north side. The drain pipe runs under the road from the north from the 183-NB Clearwell. The sides of the pit are covered with rock and gravel and there is some light natural vegetation growing in the bottom of the pit.
184-N	Process Unit/Plant	100	100-NR-1	3.6 × 4.88	Demolished	1964	2008	The 184-N Boiler and Auxiliaries provided process steam and electrical power for routine and emergency operations at 100-N.
184-NA	Process Unit/Plant	100	100-NR-1	18.29 × 22.86 × 12.19	Demolished	1967	2008	184-NA Auxiliary Power Annex was a rectangular, one story, and metal-frame building with channeled steel siding and reinforced concrete floor. Roof was comprised of pre-cast concrete panels supported by structural steel beam-girder system. The west wall of 184-NA was a common wall with 184-N. The 184-NA housed two Combustion Engineering (C/E) boilers that served as back-ups to the main boiler located in 184-N.
184-NB	Process Unit/Plant	100	100-NR-1	7.32 × 11.89 × 6.10	Demolished	1985	2006	184-NB Air Handler Main Building was a rectangular pre-engineered metal building with reinforced concrete floor. The north side of the structure was all louvers.
184-NC	Process Unit/Plant	100	100-NR-1	9.97 × 7.38 × 3.66	Demolished	1985	2006	184-NC Air Handler Annex Building was a rectangular, pre-engineered metal building on a reinforced concrete foundation that was located south of the 184-NA building. The east wall of the building was all louvers.
184-ND	Storage Tank	100	100-NR-1	24.69 × 12.50 (whole site) 6.10 diameter (each tank)	Demolished	1963	1996	184-ND Fuel/Diesel Oil Day Tanks was an at grade, reinforced concrete basin containing two 132,500 L (35,000 gal) fuel oil storage tanks and one 56,700 L (15,000 gal) catch tank located to the north of 184-N. Each fuel oil storage tank had a 0.6 m (2 ft) by 0.8 m (2.7 ft) drain sump associated with it.
184-NE-1	Storage	100	100-NR-1	1.14 × 5.08	Demolished	1963	2008	184-NE Compressed Gas Sheds were two corrugated metal, gas bottle, storage sheds attached to the south wall of 184-N. 184-NE-1 was the western shed and 184-NE-2 the eastern shed. Their north walls were common to 184-N.
184-NE-2	Storage	100	100-NR-1	1.14 × 3.25	Demolished	1963	2008	184-NE Compressed Gas Sheds were two corrugated metal, gas bottle, storage sheds attached to the south wall of 184-N. 184-NE-1 was the western shed and 184-NE-2 the eastern shed. Their north walls were common to 184-N.
184-NF	Storage	100	100-NR-1	3.6 × 4.88	Demolished	Not Recorded	2008	184-NF Chemical Injection Pump was a channeled metal sided shed attached to the south west corner of 184-N. The east wall was common to 184-N.

Table A-1. Summary of 100-N Facilities

Facility Code	Facility Type	Area	Operable Unit	Site Dimensions (m)	Facility Status	Construction Date	Demolition/ Removal/ Cocooned Date	Facility Description
185-N	Process Unit/Plant	100	100-NR-1	33.53 × 9.14 × 10.97	Demolished	1962	2004	Construction of the HGP was authorized by the Atomic Energy Commission in September of 1962 and it operated from 1966 until 1986. The facility housed two 430-MW, low-pressure turbine generators. Steam from the 100-N Reactor powered the HGP turbines before passing through the turbine condensers, where waste heat was transferred to the cooling water. The condensed steam was returned to 100-N Reactor for reuse. The condenser and auxiliary cooling systems were supplied with raw water from the Columbia River by the 181-NE HGP River Pumphouse. Cooling water was discharged to the Columbia River through the 1908-NE HGP Outfall Structure. Piping and equipment associated with the HGP steam and condensate systems became radioactively contaminated as a result of primary to secondary system leaks at the 100-N Reactor. Radionuclides of concern were Co-60, Cs137, and Sr-90.
186-N	Process Unit/Plant	100	100-NR-1	4.88 × 12.19 × 5.18	Active	2000	Not Recorded	The 186-N Potable Water Plant replaced the 163-N/183-N Facilities and was designed to supply the water for all domestic uses, such as tap water, field personnel drinking water, and sanitary use for bathrooms. After operations began, heavy concentration of particulates in the water caused disruptions in the process. A pre-filtration system, located in 1902-N, was added in 2002 to alleviate this problem.
1900-N	Storage Tank	100	100-NR-1	15.2 dia. × 11 h 22.9 dia. × 9.8 h 19.8 dia. × 12.2 h 10.7 dia. × 10.7 h	Demolished	Not Recorded	2005	The tanks were used to store, receive, and distribute water to the N Reactor and process systems. The AHR was designed as a reservoir of demineralized water for makeup to the secondary loop for normal operation and for flooding of the secondary loop in the water-to-water operation. It also served as storage for water spilled for level control of the secondary loop, water not needed in the secondary loop after the water-to-water operation, and condensate returns from various plant heaters. The DW Storage Tank was designed as a reservoir of effluent water from the demineralizer plant, and as the normal supply to the high- and low-pressure injection pumps. It also served as an emergency supply to the pumps of the afterheat removal fill system, the fog spray and fire protection pumping systems, the high lift emergency raw water pumping system, and the emergency raw water storage tank. The FW Storage Tank was designed for storage of filtered water pumped to it from the 183-N Building. The ERW Storage Tank was designed as a reservoir of tempered raw water for reactor emergency once-through cooling. The Silo was designed to supply raw water to the High Lift piping.
1902-N	Process Unit/Plant	100	100-NR-1	4.88 deep	Active	Not Recorded	Not Recorded	The 1902-N Export Water Tie-In Building is a pre-engineered metal building sitting over the 1902-N81, a Fire Protection Valve House. Metal grating over the 1902-N81 Structure acts as the floor for 1902-N. Steel ladders accessed via trap doors in the floor grating of 1902-N provide access to the 1902-N81 Facility. 1902-N81 was constructed in the mid-1980s and ties into the main export water line that runs between 100-B and 100-D. The 1902-N Structure was added in the early 1990s. These buildings together supply the water for all domestic uses, such as tap water, field personnel drinking water, and sanitary use for bathrooms. After operations began, heavy concentration of particulates in the water caused disruptions in the process. A pre-filtration system, located in 1902-N, was added in 2002 to alleviate this problem.

Table A-1. Summary of 100-N Facilities

Facility Code	Facility Type	Area	Operable Unit	Site Dimensions (m)	Facility Status	Construction Date	Demolition/ Removal/ Cocooned Date	Facility Description
1904-NA	Pump Station	100	100-NR-1	2.44 diameter × 3.91 depth	Active	1986	Not Recorded	The 1904-NA Lift Station consisted of two below-grade concrete structures, a wet well and a valve pit. The cylindrical wet well had an inside diameter of 1.8 m (6 ft) and was accessed through a double-door hatch. It contained two submersible pumps for transferring waste water into the valve pit. The valve pit was accessed through a single-door hatch and had a gravel bottom for drainage. It contained valves and metering equipment for controlling the flow through the sewer system.
1904-NB	Pump Station	100	100-NR-1	2.44 diameter × 6.58 depth	Active	1986	Not Recorded	The 1904-NB Lift Station consisted of two below-grade concrete structures, a wet well and a valve pit. The cylindrical wet well had an inside diameter of 1.8 m (6 ft) and was accessed through a double-door hatch. It contained two submersible pumps for transferring waste water into the valve pit. The valve pit was accessed through a single-door hatch and had a gravel bottom for drainage. It contained valves and metering equipment for controlling the flow through the sewer system.
1904-NC	Pump Station	100	100-NR-1	2.44 diameter × 4.78 depth	Active	1986	Not Recorded	The 1904-NC Lift Station consisted of two below-grade concrete structures, a wet well and a valve pit. The cylindrical wet well had an inside diameter of 1.8 m (6 ft) and was accessed through a double-door hatch. It contained two submersible pumps for transferring waste water into the valve pit. The valve pit was accessed through a single-door hatch and had a gravel bottom for drainage. It contained valves and metering equipment for controlling the flow through the sewer system.
1908-N BLDG	Outfall	100	100-NR-1	11.58 × 25.6 × 14.63	Inactive	Not Recorded	Not Recorded	The 1908-N Outfall Structure is a reinforced-concrete, box-shaped structure, extending several levels into the ground. Originally, cooling water from surface condensers, various heat exchangers, and other sources within 109-N and 105-N was discharged to a 168 cm (66 in.) steel line, which discharged to seal well No. 1, also a part of the 1908-N Structure. Later, to comply with the Federal Water Pollution Control Act, the moderate temperature effluent was routed to seal well No. 2. Circulating raw water effluent from the 109-N Dump Condensers discharged into a 274 cm (108 in.) steel line, which discharged into the concrete seal well No. 2. The seal well maintained a natural siphon effect on the circulating water system, which enable the pumps at the 181-N River Pumphouse to deliver water at a lower head. From seal well No. 2, the effluent discharges to a 259 cm (102 in.) outfall line to approximately the middle of the Columbia River.
1908-NE BLDG	Outfall	100	100-NR-1	23.47 × 32 × 14.33	Inactive	Not Recorded	Not Recorded	The 1908-NE HGP Outfall is a hexagonal-shaped, reinforced-concrete seal well with a pipeline extending out into the Columbia River. HGP condenser cooling water and wastewater from the 100-N-1 Settling Pond were fed into a 335 cm (132 in.) diameter steel pipe that then discharged 304 m (1,000 ft) into the Columbia River. The 1908-NE does not have any structures on its operating deck except for a chain-link safety fence, some light stanchions, and an overhead bridge crane. The outfall operated from 1966 to 1988.
1909-N	Process Unit/Plant	100	100-NR-1	2.83 × 4.19 × 4.34	Inactive	Not Recorded	Not Recorded	The 1909-N Waste Disposal Valve Pit was a below grade, reinforced-concrete valve pit with a reinforced-concrete cover block for the radioactive drain system, which is included in WIDS site 100-N-63.
1914-N	Valve Pit	100	100-NR-1	2.44 × 2.44 × 1.83	Inactive	1984	Not Recorded	The 1914-N Valve Pit was a 2.4 m (8 ft) × 2.4 m (8 ft) × 1.8 m (6 ft) reinforced concrete structure that was entirely below grade. Access to the valve pit was provided through a 71 cm (2.33 ft) × 56 cm (1.83 ft) manhole.
1926-N	Process Unit/Plant	100	100-NR-1	1.77 × 1.46 × 1.58	Inactive	Not Recorded	Not Recorded	The 1926-N Valve Pit was a below grade, reinforced-concrete structure. The 1926-N appears to have been a valve pit for directing chemical waste to the once planned, but never built Gable Mountain Crib. A 10.2 cm (4 in.) chemical waste line from the 1310-N Silo ran to the valve pit where it was blanked off in the valve pit.

Table A-1. Summary of 100-N Facilities

Facility Code	Facility Type	Area	Operable Unit	Site Dimensions (m)	Facility Status	Construction Date	Demolition/ Removal/ Cocooned Date	Facility Description
6508-S8	Process Unit/Plant	100	100-NR-1	2.74 × 2.74 × 12.19	Active	1998	Not Recorded	The 6508-S8 Siren consisted of a metal pole stabilized on a concrete pad, surmounted by a siren powered by an attached solar panel, and controlled from a separate ground-mounted panel. A small equipment silo was also associated with the structure.
MO-085	Office	100	100-NR-1	3.05 × 9.14	Active	2009	Not Recorded	The MO-085 facility was a single-wide Northwest Building System trailer, serial number 07110. The facility had vinyl wrapped sheetrock interior, with wall mounted heat pump and AC. The only utility serving the structure was electricity.
MO-088	Office	100	100-NR-1	2.44 × 3.66	Active	2010	Not Recorded	The MO-088 facility was a 2002 Whitley-Evergreen trailer, serial number 035492. It had vinyl sheetrock interior with wall mounted heating and AC. The only utility the facility was provided with was electricity.
MO-230	Office	100	100-NR-1	3.66 × 17.07	Removed	1984	1985	The MO-230 building was a single-wide Evergreen mobile office facility that was located in 100-N in the mid-1980s.
MO-231	Office	100	100-NR-1	3.66 × 17.07	Removed	1984	1985	The MO-231 building was a single-wide Evergreen mobile office facility that was located in 100-N in the mid-1980s.
MO-374-N		100	100-NR-1		Removed	Not Recorded	Not Recorded	The MO-374 Facility was a single-wide mobile office facility. The MO-374 Facility had been removed from 100-N by 1996 when it was in use in the 200 Area. It would later be used at 100-D.
MO-383	Office	100	100-NR-1		Removed	1980s	Not Recorded	While in 100-N, MO-391 was used as a field support trailer at the 100-N Laydown Yard. The trailer had previously been located at 100-F and was later located in the 300 Area.
MO-390-N		100	100-NR-1	3.1 × 9.8	Demolished	1987	2007	The MO-390 Trailer appears to have originally been located in the 200W Area near the 271-U Building during the mid-1990s, and was then relocated to 100-BC for the 105-C ISS project circa 1997. In 2000, the MO-390 trailer was brought to 100-N (079928), where it remained until it was demolished in 2007. It was a single-wide trailer that measured 3.1 × 9.8 m (10 × 32 ft).
MO-391-N	Office	100	100-NR-1	2.44 × 9.75	Removed	Not Recorded	Not Recorded	The MO-391 Facility was a single-wide mobile office facility. While in 100-N, MO-391 was used as a field support trailer at the 100-N Laydown Yard. The trailer had previously been located at 100-F and was later located in the 300 Area.
MO-423-N	Laboratory	100	100-NR-1	2.44 × 9.75	Removed	Not Recorded	Not Recorded	The MO-423 Facility was a single-wide mobile office. It contained three rooms, one of which was equipped with a fume hood, work benches, air sample pump, grinder, and HEPA filtration system. The MO-423 served as a sample preparation and storage facility in support of the EAL. Two of the three rooms within the facility were designated as RMAs. In 1999, it was observed that significant quantities of project samples remained stored in MO-423.
MO-544-N	Office	100	100-NR-1	2.44 × 9.75	Demolished	2005	Not Recorded	The MO-544 Facility was previously located in 200-W in the mid-1990s, 100-F in the late 1990s, and 100-D in 2004, before it was relocated to 100-N in 2005. It was a single-wide trailer building. The MO-544 Building was used as an RCT count room for the 107-N decommissioning project in 100-N.
MO-545-N	Office	100	100-NR-1	2.44 × 9.75	Demolished	2005	Not Recorded	The MO-545 Building was a single-wide mobile office facility. It had previously been located in 200-W and 100-F before being moved to 100-N in 2005 and used as an office in support of D&D work.
MO-740	Office	100	100-NR-1	2.44 × 3.66	Removed	2004	Not Recorded	The MO-740 Facility was a small mobile office with no electrical power. The interior had gypsum board finish. The MO-740 Facility was used to control access to the 100-N Remediation site.

Table A-1. Summary of 100-N Facilities

Facility Code	Facility Type	Area	Operable Unit	Site Dimensions (m)	Facility Status	Construction Date	Demolition/ Removal/ Cocooned Date	Facility Description
MO-765	Office	100	100-NR-1	2.44 × 3.66	Active	2004	Not Recorded	The MO-765 Facility was a single-wide trailer, used as office trailer in support of 100-NR-1 remediation activities. In 2006, the trailer was relocated to support D4 activities in 100-N.
MO-767-N	Office	100	100-NR-1	3.66 × 17.07	Removed	2004	Not Recorded	The MO-767 Facility was a single-wide mobile office, installed in 100-N in 2004. It functioned as a lunchroom trailer in support of the 116-N-1 Crib remediation project.
MO-768	Change House	100	100-NR-1	3.66 × 17.07	Removed	Not Recorded	Not Recorded	MO-768 was a single-wide trailer, used as a change trailer in support of the 116-N Crib Remedial Action Project in the mid-2000s.
MO-801	Office	100	100-NR-1	3.66 × 17.07	Active	2007	Not Recorded	The MO-801 was a single-wide facility installed in 2007 to support the Asbestos Abatement and Hazardous Material Removal subcontract at 100-N. It was used as a lunchroom trailer.
MO-802	Office	100	100-NR-1	3.66 × 17.07	Active	2007	Not Recorded	The MO-802 was a single-wide trailer, installed in 2007 to support the Asbestos Abatement and Hazardous Material Removal subcontract at 100-N. It was used as an RCT trailer.
MO-803	Office	100	100-NR-1	3.66 × 17.07	Active	2007	Not Recorded	The MO-803 was a single-wide trailer, installed in 2007 to support the Asbestos Abatement and Hazardous Material Removal subcontract at 100-N. It was used as a subcontractor trailer.
MO-804	Office	100	100-NR-1	3.66 × 17.07	Active	2007	Not Recorded	The MO-804 was a single-wide trailer, installed in 2007 to support the Asbestos Abatement and Hazardous Material Removal subcontract at 100-N. It was used as an RCT trailer.
MO-805	Office	100	100-NR-1	3.66 × 17.07	Active	2007	Not Recorded	The MO-805 was a single-wide trailer, installed in 2007 to support the Asbestos Abatement and Hazardous Material Removal subcontract at 100-N.
MO-806	Office	100	100-NR-1	312.2 m^2	Active	Not Recorded	Not Recorded	The MO-806 Facility was a four-wide trailer, installed in 2007 to house offices for WCH personnel in 100-N.
MO-807	Office	100	100-NR-1	166.5 m^2	Active	2007	Not Recorded	The MO-807 Facility was installed in 2007 to house offices for WCH personnel in 100-N.
MO-808	Office	100	100-NR-1		Active	2007	Not Recorded	The MO-808 Facility was installed in 2007 to house offices for WCH personnel in 100-N. It was a four-wide trailer.
MO-827-N	Office	100	100-NR-1	7.32 × 18.29	Removed	Not Recorded	Not Recorded	The MO-827 was a double-wide mobile office trailer, installed in 100-N in 2004 to serve as a conference room and office facility.
MO-846	Office	100	100-NR-1	7.32 × 18.29	Removed	1997	Not Recorded	The MO-846 Facility provided office space for personnel in 100-N. Previously, it had been located in 300 Area. It was a double-wide modular office trailer.
MO-864	Change House	100	100-NR-1	3.66 × 17.07	Demolished	Not Recorded	Not Recorded	The MO-864 Facility served as a mask and change trailer for personnel working in 100-N.
MO-865	Office	100	100-NR-1	3.66 × 17.07	Active	Not Recorded	Not Recorded	MO-865 Facility is a single-wide trailer and used as a mask trailer.
MO-866	Office	100	100-NR-1		Active	Not Recorded	Not Recorded	The MO-866 Facility is currently the laundry trailer. Earlier it served as a craft lunchroom trailer for personnel working in 100-N.
MO-868	Change House	100	100-NR-1	3.66 × 17.07	Inactive	Not Recorded	Not Recorded	The MO-868 Facility served as a change trailer for personnel working in 100-N.
MO-870	Office	100	100-NR-1	3.66 × 17.07	Demolished	Not Recorded	Not Recorded	The MO-870 Building was a single-wide trailer, served as a RCF in 100-N. It was used to count and identify radioactive samples from WCH projects.
MO-950	Office	100	100-NR-1	46.5 m^2	Demolished	Not Recorded	2007	The MO-950 was a single-wide mobile office trailer and used as office space at the 100-N Laydown Yard.
MO-957	Office	100	100-NR-1	3.66 × 17.07	Removed	Not Recorded	Not Recorded	MO-957 was a small mobile office and used to support construction activities at 100-N.

Table A-1. Summary of 100-N Facilities

Facility Code	Facility Type	Area	Operable Unit	Site Dimensions (m)	Facility Status	Construction Date	Demolition/ Removal/ Cocooned Date	Facility Description
MO-999-N	Office	100	100-NR-1	3.66 × 17.07	Demolished	Not Recorded	Not Recorded	The MO-999 Facility was a single-wide trailer. It had previously been located in 100-D. It was moved to the 100-N and used as office space. One section of the facility was used as roman RCT and was posted as an RBA. Currently, MO-999 is identified as an RCT Office.
TC1301-N	Process Unit/Plant	100	100-NR-1	18.29 × 6.10	Active	1995	Not Recorded	The TC1301-N facility consisted of a tent on a concrete pad, with a Connex unit located nearby to house electrical equipment. The tent was equipped with an IX skid with four columns that could be aligned in different configurations. Each column contained 1.4 m^3 (50 ft^3) of clino, a natural zeolite. Two storage tanks (an influent tank and an effluent tank) were also associated with the site.
TC1301-NA	Storage	100	100-NR-1	3.05 × 4.57 × 3.05	Active	2007	Not Recorded	The TC1301-NA facility is a metal pre-engineered structure near the TC1301-N Pump and Treat facility.
TC1301-NB	Storage	100	100-NR-1	6.4 × 2.74	Active	2007	Not Recorded	The TC1301-NB facility is a metal Connex box structure near the TC1301-N Pump and Treat facility.

BPA = Bonneville Power Administration
CFR = Code of Federal Regulations
CMS = corrective measures study
CMS/CP = corrective measures study Central Plateau
COC = contaminant of concern
CVP = closeout verification package
DOE-RL = U.S. Department of Energy Richland Office
EDT = emergency dump tank
EP = electroplated
CERCLA ROD = *Comprehensive Environmental Response, Compensation, and Liability Act of 1980* Record of Decision
ERDF = Environmental Restoration Disposal Facility
HGP = Hanford Generating Project
LERF = Liquid Effluent Retention Facility
LWDF = Liquid Waste Disposal Facility
N/A = not applicable
OU = Operable Unit
PCB = polychlorinated biphenyl
PNL = Pacific Northwest Laboratory
RI/CMS = remedial investigation/ corrective measures study
SWMU = solid waste management unit
TCLP = toxicity characteristic leaching procedure
TPH = total petroleum hydrocarbon
TSD = treatment, storage, and/or disposal
UCL = upper confidence limit
UPR = unplanned release
UST = underground storage tank

Table A-1. Summary of 100-N Facilities

Facility Code	Facility Type	Area	Operable Unit	Site Dimensions (m)	Facility Status	Construction Date	Demolition/ Removal/ Cocooned Date	Facility Description
MO-765	Office	100	100-NR-1	2.44 × 3.66	Active	2004	Not Recorded	The MO-765 Facility was a single-wide trailer, used as office trailer in support of 100-NR-1 remediation activities. In 2006, the trailer was relocated to support D4 activities in 100-N.
MO-767-N	Office	100	100-NR-1	3.66 × 17.07	Removed	2004	Not Recorded	The MO-767 Facility was a single-wide mobile office, installed in 100-N in 2004. It functioned as a lunchroom trailer in support of the 116-N-1 Crib remediation project.
MO-768	Change House	100	100-NR-1	3.66 × 17.07	Removed	Not Recorded	Not Recorded	MO-768 was a single-wide trailer, used as a change trailer in support of the 116-N Crib Remedial Action Project in the mid-2000s.
MO-801	Office	100	100-NR-1	3.66 × 17.07	Active	2007	Not Recorded	The MO-801 was a single-wide facility installed in 2007 to support the Asbestos Abatement and Hazardous Material Removal subcontract at 100-N. It was used as a lunchroom trailer.
MO-802	Office	100	100-NR-1	3.66 × 17.07	Active	2007	Not Recorded	The MO-802 was a single-wide trailer, installed in 2007 to support the Asbestos Abatement and Hazardous Material Removal subcontract at 100-N. It was used as an RCT trailer.
MO-803	Office	100	100-NR-1	3.66 × 17.07	Active	2007	Not Recorded	The MO-803 was a single-wide trailer, installed in 2007 to support the Asbestos Abatement and Hazardous Material Removal subcontract at 100-N. It was used as a subcontractor trailer.
MO-804	Office	100	100-NR-1	3.66 × 17.07	Active	2007	Not Recorded	The MO-804 was a single-wide trailer, installed in 2007 to support the Asbestos Abatement and Hazardous Material Removal subcontract at 100-N. It was used as an RCT trailer.
MO-805	Office	100	100-NR-1	3.66 × 17.07	Active	2007	Not Recorded	The MO-805 was a single-wide trailer, installed in 2007 to support the Asbestos Abatement and Hazardous Material Removal subcontract at 100-N.
MO-806	Office	100	100-NR-1	312.2 m^2	Active	Not Recorded	Not Recorded	The MO-806 Facility was a four-wide trailer, installed in 2007 to house offices for WCH personnel in 100-N.
MO-807	Office	100	100-NR-1	166.5 m^2	Active	2007	Not Recorded	The MO-807 Facility was installed in 2007 to house offices for WCH personnel in 100-N.
MO-808	Office	100	100-NR-1		Active	2007	Not Recorded	The MO-808 Facility was installed in 2007 to house offices for WCH personnel in 100-N. It was a four-wide trailer.
MO-827-N	Office	100	100-NR-1	7.32 × 18.29	Removed	Not Recorded	Not Recorded	The MO-827 was a double-wide mobile office trailer, installed in 100-N in 2004 to serve as a conference room and office facility.
MO-846	Office	100	100-NR-1	7.32 × 18.29	Removed	1997	Not Recorded	The MO-846 Facility provided office space for personnel in 100-N. Previously, it had been located in 300 Area. It was a double-wide modular office trailer.
MO-864	Change House	100	100-NR-1	3.66 × 17.07	Demolished	Not Recorded	Not Recorded	The MO-864 Facility served as a mask and change trailer for personnel working in 100-N.
MO-865	Office	100	100-NR-1	3.66 × 17.07	Active	Not Recorded	Not Recorded	MO-865 Facility is a single-wide trailer and used as a mask trailer.
MO-866	Office	100	100-NR-1		Active	Not Recorded	Not Recorded	The MO-866 Facility is currently the laundry trailer. Earlier it served as a craft lunchroom trailer for personnel working in 100-N.
MO-868	Change House	100	100-NR-1	3.66 × 17.07	Inactive	Not Recorded	Not Recorded	The MO-868 Facility served as a change trailer for personnel working in 100-N.
MO-870	Office	100	100-NR-1	3.66 × 17.07	Demolished	Not Recorded	Not Recorded	The MO-870 Building was a single-wide trailer, served as a RCF in 100-N. It was used to count and identify radioactive samples from WCH projects.
MO-950	Office	100	100-NR-1	46.5 m^2	Demolished	Not Recorded	2007	The MO-950 was a single-wide mobile office trailer and used as office space at the 100-N Laydown Yard.
MO-957	Office	100	100-NR-1	3.66 × 17.07	Removed	Not Recorded	Not Recorded	MO-957 was a small mobile office and used to support construction activities at 100-N.

Table A-1. Summary of 100-N Facilities

Facility Code	Facility Type	Area	Operable Unit	Site Dimensions (m)	Facility Status	Construction Date	Demolition/ Removal/ Cocooned Date	Facility Description
MO-999-N	Office	100	100-NR-1	3.66 × 17.07	Demolished	Not Recorded	Not Recorded	The MO-999 Facility was a single-wide trailer. It had previously been located in 100-D. It was moved to the 100-N and used as office space. One section of the facility was used as roman RCT and was posted as an RBA. Currently, MO-999 is identified as an RCT Office.
TC1301-N	Process Unit/Plant	100	100-NR-1	18.29 × 6.10	Active	1995	Not Recorded	The TC1301-N facility consisted of a tent on a concrete pad, with a Connex unit located nearby to house electrical equipment. The tent was equipped with an IX skid with four columns that could be aligned in different configurations. Each column contained 1.4 m^3 (50 ft^3) of clino, a natural zeolite. Two storage tanks (an influent tank and an effluent tank) were also associated with the site.
TC1301-NA	Storage	100	100-NR-1	3.05 × 4.57 × 3.05	Active	2007	Not Recorded	The TC1301-NA facility is a metal pre-engineered structure near the TC1301-N Pump and Treat facility.
TC1301-NB	Storage	100	100-NR-1	6.4 × 2.74	Active	2007	Not Recorded	The TC1301-NB facility is a metal Connex box structure near the TC1301-N Pump and Treat facility.

BPA = Bonneville Power Administration
CFR = Code of Federal Regulations
CMS = corrective measures study
CMS/CP = corrective measures study Central Plateau
COC = contaminant of concern
CVP = closeout verification package
DOE-RL = U.S. Department of Energy Richland Office
EDT = emergency dump tank
EP = electroplated
CERCLA ROD = *Comprehensive Environmental Response, Compensation, and Liability Act of 1980* Record of Decision
ERDF = Environmental Restoration Disposal Facility
HGP = Hanford Generating Project
LERF = Liquid Effluent Retention Facility
LWDF = Liquid Waste Disposal Facility
N/A = not applicable
OU = Operable Unit
PCB = polychlorinated biphenyl
PNL = Pacific Northwest Laboratory
RI/CMS = remedial investigation/ corrective measures study
SWMU = solid waste management unit
TCLP = toxicity characteristic leaching procedure
TPH = total petroleum hydrocarbon
TSD = treatment, storage, and/or disposal
UCL = upper confidence limit
UPR = unplanned release
UST = underground storage tank

Appendix B

100-N Waste Sites Description and History

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
100-N-1	100-N-1, HGP SWMU No. 6, Settling Pond	Pond	100-NR-1	30.48 × 12.19	This unit (100-N-1 Settling Pond SWMU No. 6) was constructed to control the Hanford Generating Plant (HGP) waste stream effluents. The effluent flowed into the pond, allowed solids to settle, and the remaining liquid was released to 1908-NE (HGP outfall). A valve was installed on the outlet pipe to prevent the discharge of oil to the outfall. The unit received waste from the HGP condenser pit, service water pumps demineralizer backwash and runoff from the roof and parking lot. An outlet pipe drained the pond directly to 1908-NE (HGP Outfall). The piping from the HGP Building floor drains and sumps to the settling pond was included with the settling pond. The settling pond was built in 1965 and became inactive in May 1993. Occasional releases of radiologically contaminated steam from N Reactor were assumed to be the source of the low level surface contamination. In September of 1993, a borehole was drilled into the Hanford Generating Plant settling pond to determine the extent of contamination beneath the waste site. Analytical results showed no evidence of chemical or radiological contamination at depth. The surface and 3 in. deep samples showed elevated levels of Co-60, chromium, lead, nickel, copper and zinc. The top three feet of the pond were excavated during remediation.	Interim Closed Out	HGP-CVP-SWMUs 5, 6, 7, 8, 9, & 10; WSRF 2004-060	2001	2001	Not Documented	0.9	Co-60	1.53	N/A	0.653	N/A
												Cd	0.74 U	N/A	0.74 U	N/A
												Cr	18.5	N/A	14.7	N/A
												Pb	29.9	N/A	15.6	N/A
												Hg	0.2 U	N/A	0.2 U	N/A
												Diesel	10	N/A	10	N/A
												Heavy oil range hydrocarbons	28.7	N/A	28.7	N/A
100-N-10	100-N-10, 120-N-5 Facility Liquid Unplanned Release 2 (09/02/87)	Unplanned Release	100-NR-1	Not Documented	The release occurred at the 120-N-5 Acid Caustic Transfer Trench. The transfer trench is a polymer lined concrete trench located between the 108-N Chemical Unloading Facility and the 163-N Demineralization Plant. On September 2, 1987, a leak was noted in the piping during a caustic transfer from the 108-N Storage Tank to the 163-N Caustic Day Tank. The caustic collected in the 120-N-5 Transfer Trench. When the leak was noticed, the transfer was stopped and the pipeline was repaired. There is no documentation to indicate the caustic reached the soil. There is no remaining evidence of the spill at the concrete lined trench. Acid and caustic spill sites are not contaminated based on natural buffering and dissociation processes in the soils.	Rejected	WSRF 2000-052	N/A								

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
100-N-100	100-N Oil Filters No. 4	Dumping Area			This site consists of petroleum based material released to the ground surface and the underlying soils. The soil is crusted and no vegetation is growing in the affected area. There are four oil filters at this location.	Accepted	N/A									
100-N-101	100-N Stain Area No. 4	Dumping Area			The site consists of the underlying soil. The soil has no vegetation growing in the affected area.	Accepted	N/A									
100-N-102	100-N Potentially Contaminated French Drains	French Drain				Accepted										
100-N-103	100-N Steam Condensate French Drains	French Drain			This site consists of 13 discrete locations and underlying soil of steam condensate French drains and their associated below grade piping components.	Accepted										
100-N-11	100-N-11, 120-N-5 Transfer Trench Liquid Unplanned Release 3	Unplanned Release	100-NR-1	Not Documented	The site is the soil adjacent to 120-N-5, a concrete lined neutralization pit, and acid caustic transfer trench. On November 9, 1987, a leak of approximately 760 L (200 gal) of sulfuric acid occurred during a transfer from the 108-N Storage Tank to the 163-N Facility. On December 4, 1987, it was noticed that the trench was open to the soil at the location where the leak occurred. This open area was found to be a dry well installed in 1986 during upgrading of the trench. The dry well was installed for steam trap drainage, not for containment of acid spills. An estimated 57 to 114 L (15 to 30 gal) of sulfuric acid was released to the ground. This release was cleaned up at the time. An unknown amount of soil was removed. Acid and caustic spill sites are not contaminated based on natural buffering and dissociation processes in the soils.	Rejected	WSRF 2000-053	N/A								
100-N-12	100-N-12, 166-N /184-N Pipelines Liquid Unplanned Release 1 (10/14/87 Cleaned Up)	Unplanned Release	100-NR-1	Not Documented	The site is a leak of fuel oil found contained in a drain trench, inside the 184-N Facility. The oil was absorbed and the trench cleaned up immediately. The spill was contained inside the building.	Not Accepted	Discovery Site Evaluation Checklist	N/A								
100-N-13	100-N-13, Contaminated Soil Solid Waste Site 1	Unplanned Release	100-NR-1	8.23 x 3.66	A May 1993 radiation survey identified the presence of cobalt-60 at the site. A photograph from about 1963 shows a dark circular area (possibly a burn pit) near this site. A 1988 photograph shows a crane (possibly regulated) parked in the vicinity of this site. The site is posted at four corners with "Underground Radioactive Material" signs. Approximately 0.3 to 0.6 m (1 to 2 ft) of soil has been placed on top of the site.	Accepted	Not Documented	N/A								

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
100-N-14	100-N-14, Contaminated Soil Solid Waste Site 2	Dumping Area	100-NR-1	2.44 x 7.32	A May 1993 radiation survey identified the presence of cesium-137 at the site. The site is posted at four corners with "Underground Radioactive Material" signs. Approximately 0.3 to 0.6 m (1 to 2 ft) of soil has been placed on top of the site.	Accepted	Not Documented	N/A								
100-N-16	100-N-16, Burn Pit 1, 128N-FS-2	Burn Pit	100-NR-1	349.32 m^2	The site (Burn Pit 1, 128N-FS-2) appears as an 18 m (20 yd) by 18 m (20 yd) semi-cleared circular area. Nonhazardous waste (paper, wood, trash) generated at 100-N were burned here. Ash is evident on the surface and the area is covered with glass, wire, coil, pipe, tin cans, metal, and other burned debris. Two other burn pits are physically located in the general area of this site and were used for similar purposes. In 1992, soil samples were collected and analyzed for the 100-NR-1 RI/CMS. Field screening samples were less than detectable for VOCs and TPH. Heavy metals and metal-complexed compounds did not differ from background. The site tested positive for PCBs.	Accepted	Not Documented	N/A								
100-N-17	100-N-17, Burn Pit 2, 128N-FS-1	Burn Pit	100-NR-1	92.90 m^2	The site (Burn Pit 2, 128N-FS-1) is covered with gravel, cobbles, and dead tumbleweeds. Much of the site has been backfilled with fill material. Two other burn pits are located in the general area of this site and were used for similar purposes. Nonhazardous waste (paper, wood, trash) generated at 100-N were burned here. Other combustible materials such as vegetation, office wastes, tools, hardware, and possibly paints and solvents have been burned at this site. In 1992, soil samples were collected and analyzed for the 100-NR-1 RI/CMS. Field screening samples were less than detectable for VOCs, TPH, and PCBs. Heavy metals and metal-complexed compounds did not differ from background.	Accepted	Not Documented	N/A								
100-N-18	100-N-18, Hanford Generating Plant Burn Pit, HGP Burn Pit	Burn Pit	100-NR-1	9.14 x 7.62	The site (HGP Burn Pit) shows evidence of burning including charred wood and burned metal. Vegetation at the site is sparse with a few rabbitbrush plants. Soil samples were collected from disturbed areas of the pit and analyzed using field screening methods. Samples tested contained less than detectable concentrations of VOCs, heavy metals, TPH, and PCBs.	Accepted	Not Documented	N/A								

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
100-N-19	100-N-19, HGP Construction Debris Dump Solid Waste Site, SWMU No. 11	Dumping Area	100-NR-1	1,000 x 150	The site (HGP Construction Debris Dump Solid Waste Site, SWMU No. 11) is a large area consisting of a series of pits and depressions containing soil, rock, concrete, metal, wood, and asphalt that have been dumped in the area over time. The site was used to dispose of non hazardous construction debris from 100-N and the HGP. The site is associated with 600-32 and 100-N-39, which are duplicate codes for the same site, a dumping area contained within the larger 100-N-19 Dumping Area. Various suspect waste site investigations and documents have identified waste dumps associated with the HGP and the BPA substation. The site descriptions in each document are similar but the location sketches are different, indicating various pits outside the HGP/BPA substation fence. These dumping areas have been entered into the WIDS database multiple times with various different names because the reference document authors were not aware of the other references.	Rejected	WSRF 2004-092	N/A								
100-N-21	100-N-21, Blast Yard Solid Waste Site, 1143-N Blast Yard	Dumping Area	100-NR-1	20 (diameter)	The site (1143-N Blast Yard) has thin, scattered patches of red garnet sandblasting material. Paint chips reported in 1994 as being mixed in with the garnet are no longer visible. The site is in use as a parking lot. The garnet was used to sandblast noncontaminated equipment prior to painting. Samples of sandblast debris, presumably including the paint chips cleaned from the objects, were analyzed in 1989. The samples were taken from 12 sandblast sites in the 100 Areas. All samples, including two from this site, were shown to be nonregulated for EP toxicity in accordance with WAC 173-303-090. No cleanup activities are recorded; the visual absence of the paint chips in 2000 may be due to wind action or crumbling from vehicle tires.	Rejected	WSRF 2000-032	N/A								
100-N-22	100-N-22, Sanitary Sewer System (Undocumented) 1705-N Septic Tank and Cesspool	Septic Tank	100-NR-1	Not Documented	This site (1705-N Septic Tank and Cesspool) most likely served the 105-N, 1705-N, and 1706-N Buildings. A 1.1 m (3.5 ft) metal cover with a confined space posting is at ground level in the general area of the underground site.	Accepted	Not Documented	N/A								

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
100-N-23	100-N-23, Resin Disposal Pit Liquid Waste Site 1	Process Pit	100-NR-1	22.86 x 16.76 x 2.49	According to site personnel, the pit was used to dispose of resin generated in the 163-N Demineralized Water Plant. The pit later served as the clear well overflow up until about 1990. Although it is not used for that purpose anymore, it could be used on an emergency basis. On May 5, 1980 and January 1976, the overflow sump received neutralized waste that was pumped from cleanup actions for an acid spill that occurred on the 108-N/163-N Transfer Line. There are two drain pipes originating from the 163-N Clearwell that discharge into this site. It is reported that between 1990 and 1992, the resin was excavated out of the pit and it is unlikely that any remains today. Since the pit received water discharged from the clearwell overflow after it was used as a resin pit, any remaining resin would probably have worked down into the soil.	Accepted	Not Documented	N/A								
100-N-24	100-N-24, Hydrogen Dry Well Liquid Waste Site, Hydrogen Peroxide Drywell	French Drain	100-NR-1	4.42 x 3.35	The site (Hydrogen Peroxide Drywell) is identified by a buried vertical concrete pipe with a 0.83 m diameter steel cover. The site received 50% hydrogen peroxide and water from the hydrogen peroxide sump under the hydrogen peroxide tank located in the 109-N Decontamination Facility. The solution used for washing down of the storage tank area. The hydrogen peroxide drywell was constructed to receive and disperse liquids from the Hydrogen Peroxide Sump Pump to the surrounding soil below ground level. The waste is the predominantly concrete and metal structure of the hydrogen peroxide drywell.	Accepted	Not Documented	N/A								
100-N-25	100-N-25, French Drain 1 Liquid Waste Site (100N TBR 4.86)	French Drain	100-NR-1	0.91 diameter	The site has a 0.9 m (3 ft) diameter metal cover at grade. The surrounding area is covered with gravel.	Accepted	Not Documented	N/A								
100-N-26	100-N-26, French Drain 2 Liquid Waste Site (100N TBR 4.87)	French Drain	100-NR-1	0.91 diameter	The site receives yard steam condensate. The vertical concrete pipe extends 5 cm (2 in.) above grade and is closed by a vented metal cover. The surrounding area is covered with gravel. Waste sites 100-N-26 and 120-N-4 were impacted by a raw water pipeline break on 12/11/2008. In-process and post-event surface soil radiological field survey results did not find any contamination spread as a result of the water release.	Accepted	Not Documented	N/A								

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
100-N-27	100-N-27, 108-N Sump, 108-N Neutralization Pit	Sump	100-NR-1	1.52 × 1.1 × 1.83	The site (108-N Neutralization Pit) is constructed of concrete with a brick lining, and is covered with a steel lid. The pit was used to manually neutralize waste acid. This site received drainage from the 108-N floor drains and from the acid transfer tank. Sufficient quantities of 50% sodium hydroxide were used to neutralize the 93% sulfuric acid waste. The brick lining was replaced at least once. No known leaks occurred in the system.	Rejected	WSRF 2000-054	N/A								
100-N-28	100-N-28, Resin Disposal Pit Liquid Waste Site 2	Process Pit	100-NR-1	5.33 × 3.81 × 4.11	The site (Resin Disposal Pit Liquid Waste Site 2) was designed to receive the resin charge from the 109-N Ion Exchanger. The construction of the pit is such that all liquids entrained in the resin are filtered to the soil below the resin disposal pit. The effective volume of the resin disposal pit was 40.36 m^3 and the maximum resin charge in the ion exchange was 3.12 m^3. Site employees report that the pit was initially used for reactor decontamination waste and may have never actually been used as a resin disposal pit.	Accepted	Not Documented	N/A								
100-N-29	100-N-29, Unplanned Release on 25 cm (10 in.) Blowdown Pipeline No. 1	Unplanned Release	100-NR-1	Not Documented	The 1300-N Emergency Dump Basin is an open basin that held radioactive water. The area surrounding it is level and graveled with no vegetation. Through process knowledge, it is known that several water leaks occurred around and adjacent to the dump basin in the early 1980s.	Accepted	Not Documented	N/A								
100-N-3	100-N-3, Maintenance Garage French Drain, HGP-SWMU No. 9, Maintenance Garage Waste Water Treatment Unit	French Drain	100-NR-1	3.05 × 3.05	The site (100-N-3 Maintenance Garage French Drain SWMU No. 9) received effluent from 100-N-78, the 1716-NE HGP Maintenance Garage. The unit received petroleum wastes. The WPPSS HGP RCRA Final Report described SWMU No. 9 as three waste water treatment units (100-N-3, 100-N-45, 100-N-41) located east of the HGP building (185-N). Soil samples were collected from each site excavation in 2004 and analyzed for petroleum hydrocarbons. Petroleum hydrocarbons were not detected in any of the samples. Remediation was not necessary. The below grade structures were demolished in place and backfilled with soil in 2004.	Interim Closed Out	HGP-CVP-SWMUs 5, 6, 7, 8, 9, & 10 WSRF 2004-060	April 2004 (confirmatory sampling)	April 2004 (confirmatory sampling)	N/A	N/A	Diesel range petroleum hydrocarbons	20 U	N/A	N/A	N/A
												Heavy oil range petroleum hydrocarbons	50 U	N/A	N/A	N/A

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
100-N-30	100-N-30, Unplanned Release on 10 in. Blowdown Pipeline No. 2	Unplanned Release	100-NR-1	Not Documented	The site (Unplanned Release on 10 in. Blowdown Pipeline No. 2) is a level, graveled area with no vegetation. The area surrounding the dump basin is also graveled. The site is an open metal basin that held radioactive water. Through process knowledge, it is known that several water leaks occurred around and adjacent to the dump basin in the early 1980s.	Accepted	Not Documented	N/A									
100-N-31	100-N-31, Unplanned Release on 30 in. Pipe Line	Unplanned Release	100-NR-1	Not Documented	The unit (unplanned release on 30 in. Pipe Line) is an open metal basin that held radioactive water. The surface area has no vegetation and is level and graveled. Through process knowledge, it is known that several water leaks occurred around and adjacent to the dump basin in the early 1980s.	Accepted	Not Documented	N/A								
100-N-32	100-N-32, Unplanned Release on 25 cm (10 in.) Blowdown Pipeline No. 3	Unplanned Release	100-NR-1	Not Documented	The unit (Unplanned Release on 25 cm (10 in.) Blowdown Pipeline No. 3) is an open metal basin that held radioactive water. The surface area is level, graveled, and has no vegetation. Through process knowledge it is known that several water leaks have occurred around and adjacent to the dump basin in the early 1980s.	Accepted	Not Documented	N/A								
100-N-33	100-N-33, 100-N Military Installation Ash Pit	Coal Ash Pit	100-NR-1	Not Documented	The irregularly-shaped site (100-N Military Installation Ash Pit) is covered with a dark material that looks like uniform grain-size ash, perhaps the remnants of coal burning.	Accepted	Not Documented	N/A								
100-N-34	100-N-34, Debris Site	Dumping Area	100-NR-1	Not Documented	The debris site is an irregular shape with gravel/cobble (some in piles), weedy vegetation, and dead tumbleweeds (some in piles) present. Construction debris including asphalt, concrete, and metal pipe are also present.	Accepted	Not Documented	N/A								
100-N-35	100-N-35, BPA Hanford Substation, Hanford Generating Plant (HGP) Substation	Electrical Substation	100-NR-1	Not Documented	The substation consists of a control house, maintenance building, microwave tower, and a switchyard. The Hanford Generating Plant (185-N Building) produced electricity for the Bonneville Power Association (BPA) grid using steam from the N-Reactor operation. The Hanford Substation distributed the power into the grid. The Hanford Generating Plant operated continuously from April 1966 to December 1986. As of August 2000, the BPA Hanford Substation was still active. This site is on leased land, which is excluded from the Tri-Party Agreement (Ecology et al., 1989a). Consequently, it is not addressed as part of the 100-NR-1 Work Plan. The facility start date was July 12, 1971. The site is still active.	Not Accepted (proposed)	Proposed at this time	N/A								

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
100-N-36	100-N-36, 107-N Oil Stained Pad	Unplanned Release	100-NR-1	Not Documented	The site consists of an air compressor pad adjacent to the 107-N Building. The concrete pad and adjacent asphalt are stained with lube oil from the air compressor that was previously installed on the concrete pad. It is evident that any leakage or release to the soil from the "seam" between the asphalt and concrete would be minimal if at all. When the area is decommissioned and the concrete and asphalt is removed, if any of the oil has reached the soil beneath, it would be removed and disposed of with the concrete and asphalt. The waste consists of non-hazardous petroleum product (oil) from air compressor leaks.	Accepted	Not Documented	N/A									
100-N-37	100-N-37, 109-N Asbestos Release	Unplanned Release	100-NR-1	Not Documented	Heavy rainfall caused a subsidence next to a caisson directly beneath the west elbow of the steam transfer line at the 109-N Building. The same rainfall saturated asbestos insulation lagging on the steam transfer piping causing a large chunk (estimated to weigh 180 to 320 kg to fall off. It was apparent that some of the asbestos insulation washed down the subsidence next to the caisson. Surface asbestos material was cleaned up and disposed of. The subsidence was backfilled with clean fill material. No action was taken to remove asbestos contamination from the subsidence. Any excavation at the site could cause an airborne release of asbestos materials.	Accepted	Not Documented	N/A									
100-N-38	100-N-38, Unplanned Release at 1300-N	Unplanned Release	100-NR-1	Not Documented	This site (Unplanned Release at 1300-N) is an open basin with a steel liner that held radioactive water. The area surrounding the basin is level, graveled, and has no vegetation. Through process knowledge it is known that several water leaks have occurred around and adjacent to the dump basin in the early 1980s.	Accepted	Not Documented	N/A								

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
100-N-39	100-N-39, Hanford Substation Construction Dump Area, SWMU No. 11	Dumping Area	100-NR-1	Not Documented	The site (HGP Construction Debris Dump Solid Waste Site, SWMU No. 11) is a large area consisting of a series of pits and depressions containing soil, rock, concrete, metal, wood, and asphalt that have been dumped in the area over time. The site was used to dispose of non-hazardous construction debris from 100-N and the HGP. The site is associated with 600-32 and 100-N-39, which are duplicate codes for the same site, a dumping area contained within the larger 100-N-19 Dumping Area. Various suspect waste site investigations and documents have identified waste dumps associated with the HGP and the BPA substation. The site descriptions in each document are similar but the location sketches are different, indicating various pits outside the HGP/BPA substation fence. These dumping areas have been entered into the WIDS database multiple times with various different names because the reference document authors were not aware of the other references.	Rejected	WSRF 2000-114	N/A							
100-N-4	100-N-4, HGP SWMU No. 5 Tile Field	Drain/Tile Field	100-NR-1	30.48 × 24.69	The site (100-N-4 Tile Field-SWMU No. 5) was an ancillary or support facility to the former HGP. The site received effluent from the 185-N Building drains of the HGP Sanitary Sewer and lab. Testing for corrosion inhibitors hydrazine and morpholine were performed in the lab. It is likely that reagents used for these tests were discharged to the unit. The unit was designed to release waste water by allowing it to percolate into the soil. Remediation was not necessary after evaluating confirmatory sampling data and protectiveness assessments.	Interim Closed Out	HGP-CVP-SWMUs 5, 6, 7, 8, 9, & 10 WSRF 2004-060	2001 (confirmatory sampling)	2003 (confirmatory sampling)	N/A	N/A	Co-60	2.99	N/A	0.294	N/A
												Cd	0.66 U	N/A	0.66 U	N/A
												Cr (total)	11.2	N/A	10.5	N/A
												Pb	15.3	N/A	10.7	N/A
												Hg	0.2 U	N/A	0.2 U	N/A
												Diesel range petroleum hydrocarbons	10 U	N/A	10 U	N/A
												Heavy oil range petroleum hydrocarbons	25.4	N/A	25.4	N/A
100-N-40	100-N-40, Unplanned Release at 108-N	Unplanned Release	100-NR-1	Not Documented	The site is a graveled field at the 108-N Chemical Unloading Facility. Approximately 38 L (10 gal) of sodium hydroxide was spilled to the ground on December 26, 1987. Difficulties during the transfer of sodium hydroxide from a rail car to the caustic storage tank prompted the operator to disconnect the transfer line and set it on the ground. The spill was cleaned up on December 31, 1987, but the extent of the remediation was not documented. Acid and caustic spill sites are not contaminated based on natural buffering and dissociation processes in the soils.	Rejected	WSRF 2000-055	N/A							

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
100-N-41	100-N-41, 1701-NE Gate House Septic Tank, HGP-SWMU No. 9	Septic Tank	100-NR-1	3.05 × 3.05	The site (100-N-41 Gate House Septic Tank-SWMU No. 9) consisted of a septic system that received sanitary sewer effluent from the 1701-NE Gate House. The WPPSS HGP RCRA Final Report described Solid SWMU No. 9 as three-wastewater treatment units (100-N-3, 100-N-45, 100-N-41) located east of the HGP building (185-N). Remediation was not necessary. The below grade structures were demolished in place and backfilled with soil in 2004.	Interim Closed Out	HGP-CVP-SWMUs 5, 6, 7, 8, 9, & 10 WSRF 2004-060	April 2004 (confirmatory sampling)	April 2004 (confirmatory sampling)	N/A	N/A	Diesel range petroleum hydrocarbons	20 U	N/A	N/A	N/A
												Heavy oil range petroleum hydrocarbons	50 U	N/A	N/A	N/A
100-N-45	100-N-45, 1703-N Septic Tank, HGP-SWMU No. 9	Septic Tank	100-NR-1	3.05 × 3.05	The site (SWMU No. 9) received sanitary sewer effluent from the 1703-N office building. The WPPSS HGP RCRA Final Report described Solid SWMU No. 9 as three wastewater treatment units (100-N-3, 100-N-45, 100-N-41) located east of the HGP building (185-N). Remediation was not necessary. The below grade structures were demolished in place and backfilled with soil in 2004.	Interim Closed Out	HGP-CVP-SWMUs 5, 6, 7, 8, 9, & 10 WSRF 2004-060	May 2004 (confirmatory sampling)	May 2004 (confirmatory sampling)	N/A	N/A	Diesel range petroleum hydrocarbons	20 U	N/A	N/A	N/A
												Heavy oil range petroleum hydrocarbons	50 U	N/A	N/A	N/A
100-N-46	100-N-46, HGP Diesel Oil Storage Tank	Storage Tank	100-NR-1	Not Documented	The site (HGP Diesel Oil Storage Tank) was a 75,700 L (20,000 gal) UST used for storing diesel fuel. The UST supplied diesel fuel to a backup generator and a backup heating boiler located in the former 185-N Building. The UST was located on the east side of the former 185-N Building. The UST was excavated and removed in 2001. Soil contaminated with diesel was also excavated from the UST excavation. Contaminated soil was spread over the former 1703-N Office Building concrete slab foundation for attenuation.	Interim Closed Out	HGP-CVP-SWMUs 5, 6, 7, 8, 9, & 10 WSRF 2004-060	2001	2001	Not Available	6.7	Diesel range petroleum hydrocarbons	40 U	N/A	N/A	N/A

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
100-N-47	100-N-47, Military Artillery Site Solid Waste Site	Military Compound	100-NR-1	609 × 213	The site (Military Artillery Site Solid Waste Site) includes ten separate intact concrete foundations and remnants of at least one other. A number of concrete walkways and remnants of walkways are associated with the foundations. There are remnants of asphalt roadways, parking areas, and piles of broken-up asphalt. There is a 0.6 m (2 ft) diameter sewer manhole and three associated down slope 1.2 × 1.2 m (4 × 4 ft) -square concrete hatch covers (likely underground sanitary waste holding areas). Strewn through the military artillery site are wood poles, metal cables, wire, metal pipe, glass, paint cans, fire hose, metal cans, broken up concrete, concrete blocks, wood pallets, bricks, and transite siding. A number of 0.3 m (1 ft) diameter wooden poles are standing, and some have been cut off at ground level. On the 6.1 m (20 ft) by 15.2 m (50 ft) concrete foundation that is positioned between two 6.1 m (20 ft) -high soil berms, are 31 (41 cm [16 in.] -wide and 51 cm [20 in.] long) hive bodies and supers (bee boxes) left from a Pacific Northwest Laboratory (PNL) experiment conducted from 1981 to 1984. No strong evidence of hazardous or radioactive material has been found.	Accepted	Not Documented	N/A							
100-N-5	100-N-5, HGP Disposal and Storage Area, HGP Bone Yard, HGP-SWMU No. 10	Storage	100-NR-1	5,181 m^2	The site (HGP Disposal and Storage Area-SWMU No. 10) consisted of material and equipment that were stored inside the southwest corner of the Hanford Generating Plant facility fence. Some of the material included scrap metal, electrical equipment, pipes, and cables. The unit was located on a level area that had several spots of stressed or absent vegetation. Some of the soil was oil stained. Garnet sandblasting grit was also present. Remediation waste consisting of sand blast, ion exchange resin, and contaminated soil wastes were disposed of at the RABANCO landfill facility in Roosevelt, Washington.	Interim Closed Out	HGP-CVP-SWMUs 5, 6, 7, 8, 9, & 10 WSRF 2004-060	2001	2004	Waste was sent to RABANCO Landfill Facility	Not Documented	Pb	3.6	N/A	N/A	N/A
													Diesel range petroleum hydrocarbons	20 U	N/A	20 U	N/A
													Heavy oil range petroleum hydrocarbons	940	N/A	N/A	N/A
													Cadmium, chromium, and mercury concentrations are also reported in the CVP; however, these results are from pre-remediation sampling.				

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
100-N-50	100-N-50, HGP SWMU 4, Turbine Oil filter Unit, Turbine oil cleaning system	Single Shell Tank	100-NR-1	2.44×2.44	The 100-N-50 Turbine Oil Filter Unit (SWMU No. 4) was located in the 185-N Building basement along the northeast and southeast walls. The filter unit was used to clean turbine oil located in the basement of the Hanford Generating Plant (HGP) Building. It was surrounded by a concrete berm. The turbine oil filter unit was used to clean turbine oil during plant operation. The filters that contained waste are no longer in this inactive unit and their disposal location is unknown. The unit was on a concrete floor surrounded by a concrete curb that should have contained any small leaks. No releases are known to have occurred from this unit.	Interim Closed Out	HGP-CVP-SWMUs 1, 2, 3, & 4 WSRF 2004-059	2001	2004	Not Documented	Not Available (equipment removal and concrete scabbling)	Cd Cr (total) Pb Hg	Verification of cleanup of the concrete and metal building surfaces associated with the 185-N Building basement sites (100-N-51 Oil Storage Area [SWMU No. 2], 185-N Building Sumps and Drains [SWMU No. 3], and 100-N-50 Oil Filter Unit [SWMU No. 4]) is primarily based on photographic documentation and a qualitative and conservative bounding assessment rather than analytical laboratory data. For these cleaned but residually contaminated surfaces, verification is primarily in the form of documentation that the residual waste has been removed. The qualitative and conservative bounding protectiveness assessment for the 185-N Building basement sites is provided in Section 6.0 of the referenced decision document.			
100-N-51	100-N-51, HGP Building Oil Storage Area, 100-N-51A, HGP SWMU No. 2	Storage	100-NR-1	7.62×2.44	The site (HGP Building Oil Storage Area, SMU No. 2) consisted of a cinder block room with a fire sprinkler system, steel grate floor, and shelving along the walls. The Hanford Generating Plant (HGP) Building Oil Storage Area was used to store both product and waste chemicals, some of which had hazardous constituents. The room was well designed for this purpose and no releases are known to have occurred. Stains on the grate and sump floor indicated that minor leaks from containers had been contained within the unit. A blind concrete sump (no outlet) was located below the grated floor.	Interim Closed Out	HGP-CVP-SWMUs 1, 2, 3, & 4 WSRF 2004-059	2001	2004	Not Documented	N/A (equipment removal and concrete scabbling)	Cd Cr (total) Pb Hg	Verification of cleanup of the concrete and metal building surfaces associated with the 185-N Building basement sites (100-N-51 Oil Storage Area [SWMU No. 2], 185-N Building Sumps and Drains [SWMU No. 3], and 100-N-50 Oil Filter Unit [SWMU No. 4]) is primarily based on photographic documentation and a qualitative and conservative bounding assessment rather than analytical laboratory data. For these cleaned but residually contaminated surfaces, verification is primarily in the form of documentation that the residual waste has been removed. The qualitative and conservative bounding protectiveness assessment for the 185-N Building basement sites is provided in Section 6.0 of the referenced decision document.			

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
100-N-51B	100-N-51B, HGP Building Floor Drains and Sumps, HGP SWMU No. 3	Sump	100-NR-1	Not Documented	HGP (185-N Building) Floor Drains and Sumps, HGP SWMU No. 3. The 185-N Building basement contained miscellaneous drains and sumps that are collectively included in SWMU No. 3. The drains and sumps collected spilled or leaked fluids. Some of the drains and all of the sumps were routed to a central sump.	Interim Closed Out	HGP-CVP-SWMUs 1, 2, 3, & 4	2001	2004	Not Documented	Not Available (equipment removal and concrete scabbling)	Cs-137	N/A	N/A	16.9	N/A
												Co-60	N/A	N/A	60.8	N/A
												Sr-90	N/A	N/A	0.25	N/A
												Statistical values for radionuclides were calculated using the waste characterization data and applied to the entire debris, cement grout controlled density fill, and borrow soil layer. This is extremely conservative, because the remaining residual waste would make up a fraction of a percent of the total fill layer volume. To ensure that this approach was conservative and to ensure that the radioactivity of the debris fill was adequately accounted for, the modeled radionuclide inventory was compared to a previously calculated inventory for the HGP facility. This comparison indicated that the approach is conservative. The inventory comparison is included in Appendix D of the referenced closure document.				
												Cd Cr (total) Pb Hg	Verification of cleanup of the concrete and metal building surfaces associated with the 185-N Building basement sites (100-N-51 Oil Storage Area [SWMU No. 2], 185-N Building Sumps and Drains [SWMU No. 3], and 100-N-50 Oil Filter Unit [SWMU No. 4]) is primarily based on photographic documentation and a qualitative and conservative bounding assessment rather than analytical laboratory data. For these cleaned but residually contaminated surfaces, verification is primarily in the form of documentation that the residual waste has been removed. The qualitative and conservative bounding protectiveness assessment for the 185-N Building basement sites is provided in Section 6.0 of the referenced closure document.			
100-N-52	100-N-52, HGP Gasoline Storage Tank	Storage Tank	100-NR-1	Not Documented	The site (HGP Gasoline Storage Tank) was located immediately north of the former 1716-NE Maintenance Garage and was used for the storage and dispensing of gasoline for maintenance vehicles. The tank had a capacity of 3,800 L (1,000 gal) and held unleaded gasoline. The UST was excavated and removed in 1992. The UST assessment report was included as Appendix D of the HGP-CVP-SWMUs 5, 6, 7, 8, 9, & 10. Because the 100-N-52 (UST) site was adjacent to the maintenance garage (100-N-78), it was included in the HGP-CVP for regulatory closure. Sample results were non-detectable for WTPH-HCID. (The 100-N-52 Gasoline UST site was not identified as a part of SWMU No. 8; however, because the UST was adjacent to the maintenance garage, SWMU No. 8 and the UST site were treated as a single unit.)	Interim Closed Out	HGP-CVP-SWMUs 5, 6, 7, 8, 9, & 10 WSRF 2004-060	1992	1992	N/A		Diesel range petroleum hydrocarbons	25 U	N/A	25 U	N/A

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
100-N-53		Storage Tank	100-NR-1	1.25 (deep) × 1.07 (diameter)	The site (181-N Building Waste Oil Tank) was an empty above-ground waste oil tank. The site received waste oil from diesel powered emergency pumps in the 181-N Building. The tank was in good condition and the potential for environmental release was low. A site visit in July 1999 found that the tank has been removed.	Accepted	Not Documented	N/A								
100-N-54		French Drain	100-NR-1	1.65 (diameter)	The site (151-N Building Drywell) is a French drain, made of 1.2 m (4 ft) inner diameter and 1.65 m (5 ft 5 in.) outer diameter concrete pipe, with a steel cover. The site received waste water from the service sink located inside the 151-N Building. The 151-N Building controlled electrical power distribution to 100-N facilities from the 151-N substation. The 151-N substation has been deactivated. Service water to the sink has been disconnected and sealed. The sink drain has also been sealed. The miscellaneous stream was eliminated July 11, 1997.	Accepted	Not Documented	N/A								
100-N-55		French Drain	100-NR-1	1.22 (diameter)	The site (153-N Building Drywell) is a French drain with a 1.2 m (4 ft) steel cover. The drywell receives steam condensate from a condensate pump and drainage from a service sink in the 153-N Building. The 153-N Building is the switchgear building, and contains a transformer/substation taking 13.8 kilovolts down to 4,160 volts. This miscellaneous stream was eliminated on July 7, 1997.	Accepted	Not Documented	N/A								
100-N-56		French Drain	100-NR-1	1.22 m (diameter)	The site (181-N Building Drywell) received waste water from the 181-N River Pumphouse Building. The drywell is not visible from ground surface and is apparently located underground. The ground surface is graveled. River water from inside the 181-N Pumphouse is the only source of waste water to this site.	Rejected	WSRF 2000-061	N/A								

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
100-N-57	100-N-57, 1304-N Emergency Dump Tank	Catch Tank	100-NR-1	18.59 × 19.2	The site (1304-N Emergency Dump Tank) consists of a 500,000-gal above-ground storage tank used for emergency blowdown of thermally hot pressurized reactor primary coolant water. The tank maintained a constant volume of 2.6E+06 L (6.8E+05 gal) of unheated quench water. Because a small flow of primary coolant was maintained to the 1304-N Emergency Dump Tank to keep interconnecting piping in a thermally warm condition, the quench water normally contained a small inventory of radioactive materials. In 1974, four unplanned releases of primary reactor coolant were released from the 1304-N Emergency Dump Tank to the ground.	Accepted	Not Documented	N/A								
100-N-58	100-N-58, South Pond, 120-N South Settling Pond, 1324-N South Settling Pond	Pond	100-NR-1	33.53 × 15.24 × 4.57	The 100-N-58 site (120-N or 1324-N South Settling Pond) was initially constructed along with the 120-N-1, 120-N-2 sites (East Percolation Pond and North Settling Pond). These unlined ponds received 163-N anion/cation regeneration effluent as well as the 183-N Filtered Water Plant filter backwash effluent. In 1982, the 183-N filter backwash was rerouted and the 100-N-58 site was backfilled because of pond percolation problems. The 100-N-58 site was remediated with the 120-N-1 and 120-N-2 sites in September/ October 2000.	Closed Out	CVP 2001-00021 WSRF 2001-093	N/A	N/A	None (material was disposed of in the inert demolition landfill in 100-H)	N/A	Ba	93.7	N/A	86.9	N/A
												Cr (total)	14.6	N/A	10.5	N/A
												Cu	31.5	N/A	16.4	N/A
												Pb	6.4	N/A	4.4	N/A
												Hg	0.37	N/A	0.05	N/A
												Ni	17.6	N/A	13.5	N/A
												Zn	94.4	N/A	53.4	N/A
												Sulfate	135	N/A	55.7	N/A
100-N-59	100-N-59, Radioactively Contaminated Soil Northeast of 105-NB Building	Unplanned Release	100-NR-1	0.76 × 1.37	In September 1995, an underground liquid waste pipeline was found to be leaking. An area approximately 0.76 m (2.5 ft) by 1.4 m (4.5 ft) was excavated to repair the pipe. The soil below the pipe had a beta/gamma reading of 7,000 disintegrations per minute. A direct reading on the broken pipe found 35,000 disintegrations per minute. After repairing the pipe, the excavation was backfilled with clean dirt and posted with an Underground Radioactive Material sign. A site visit in August 2000 found that the single post with the Underground Radioactive Material sign was gone, but an Underground Radioactive Material sign was attached to the fence near the waste site.	Accepted	Not Documented	N/A								

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
100-N-6	100-N-6, 128-N-1, 128N-FS-3	Burn Pit	100-NR-1	1486 m^2	The site (128-N-1 or 128N-FS-3) is a burn pit associated with two other burn pits, 100-N-16, and 128-N-1. In 1993, shallow soil samples were collected from several burn pits in the 100-NR-1 Operable Unit. The maximum depth of the samples was 0.3 m (1 ft). The samples were analyzed for volatile organic compounds (VOC), total petroleum hydrocarbons (TPH) and polychlorinated hydrocarbons (PCB). They were also examined with X-ray Fluorescence Spectroscopy (XRF). The samples were less than detectable for VOC and TPH. One sample taken at 128-FS-3 contained a slightly elevated amount of PCB. No heavy metals or metal compounds were identified. In 1992, soil samples were collected and analyzed for the 100-NR-1 Remedial Investigation/Corrective Measures Study (RI/CMS) (DOE/RL-90-22). Field screening were less than detectable for VOCs, TPH, and PCBs. Heavy metals and metal-complexed compounds did not differ from background.	Accepted	Not Documented	N/A							
100-N-60	100-N-60, 1314-N Drywell	French Drain	100-NR-1	Not Documented	The site (1314-N Drywell) reportedly received spent decontamination solutions from a railroad waste tank car during an unplanned release. Occurrence Report 73-39 mentions a release of decontamination solutions that overflowed from a catch basin to an adjacent drywell. The drywell was not included in the WIDS database. A field investigation done in 1996 failed to visually locate the drywell as discussed in the referenced occurrence report. It is suspected that the area surrounding the catch tank may have been referred to as the drywell. Drawing H-1-37675, Detail D, shows a 5 cm (2 in.) underground drain pipe to a "drywell." It is possible the drywell exists, but cannot be visually verified. The site is suspected to be located underneath the 1314-N Building, in the southwest corner of the building in the vicinity of the catch tank.	Accepted	Not Documented	N/A							

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
100-N-61	100-N-61, 100-N Water Treatment and Storage Facilities Underground Pipelines	Process Sewer	100-NR-1	Not Documented	The site (100-N Water Treatment and Storage Facilities Underground Pipelines) encompasses all underground water pipelines used to transport reactor cooling water between water treatment facilities and the 105-N Reactor Building. These include all underground lines running between buildings and those that run to drainage facilities. Pipelines within buildings and all pipelines that are downstream from the reactor building (i.e., those lines that carry cooling water from the reactor to effluent disposal facilities such as the dump tank and cribs are excluded). Other underground pipelines running to the outfall structures are included in other waste sites and are therefore excluded from this site. Reactor cooling water was pumped from the Columbia River, settled and treated to remove minerals, then injected into the reactor primary coolant loop at a rate of about 760 L/minute (200 gal/minute).	Accepted	Not Documented	N/A							
100-N-62	100-N-62, 100-N 105-N, 109-N, 163-N, 182-N, 183-N and 184-N Underground Pipelines	Radioactive Process Sewer	100-NR-1	Not Documented	This site includes those underground pipelines that transported reactor decontamination chemicals and/or radioactive liquid wastes from the105-N/ 109-N Reactor facilities, and other pipelines that have the potential for radioactive contamination that are co-located on the east side of the 105-N/109-N Building complex. It does not include the pipelines that discharge to the 116-N-4 (1300-N), the 1304-N Emergency Dump Tank, pipelines to and from the 107-N and 105-N Buildings, or pipelines from the 105-N/109-N Buildings to the 1908-N Outfall that are addressed by a separate Waste Information Data System (WIDS) entry (100-N-65) for 100-N Reactor 105-N/109-N Cooling Water Effluent Underground Pipelines.	Accepted	Not Documented	N/A							

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
100-N-63	100-N-63, 100-N Reactor (1314-N, 116-N-1 and 116-N-3) TSD Underground Pipelines; 100-N-63:1 Pipeline and concrete encased pipe bypass structure	Radioactive Process Sewer	100-NR-1	Not Documented	The site (100-N Reactor (1314-N, 116-N-1 and 116-N-3) TSD Underground Pipelines [See Subsites]) encompasses the Treatment, Storage, and Disposal (TSD) underground pipelines that transported reactor cooling water and radioactive liquid wastes from the 105-N Reactor facilities to the 116-N-1 (1301-N), 116-N-3 (1325-N) Crib, and 116-N-2 (1310-N Tank). It does not include the underground pipelines that discharge to the 116-N-4 (1300-N Emergency Dump Basin), 1304-N Emergency Dump Tank, pipelines to and from the 107-N and 105-N Buildings, or pipelines from the 105/109-N Buildings to the 1908-N Outfall that are addressed by a separate Waste Information Data System (WIDS) entry for the 100-N Reactor 105/109-N Cooling Water Effluent Underground Pipelines.	Accepted	CVP-2002-00002 WSRF 2002-055	21-Jul-00	1-Apr-02	140,270	>4.6	Am-241	0.387U	999[c]	0.102	154[c]
												Co-60	0.796	62400[c]	0.387	5580[c]
												Cs-137	1.27	43100[c]	0.406	4900[c]
												Eu-154	0.18U	0.211[c]	0.0603	8.7[c]
												Eu-155	0.13U	130U[c]	0.0422	6.45[c]
												H-3	N/A	2.57U[c]	N/A	-0.00726[c]
												Ni-63	0.856U	6040[c]	-0.0622	1030[c]
												Pu-239/240	0.137U	1730[c]	0.0282	258[c]
												Sr-90	1.14	3710[c]	0.17	1460[c]
												Hg	0.02U	N/A[c]	0.02	N/A
												Nitrate	2.1	14.8[c]	1.24	3[c]
100-N-63:1	100-N-63:1, Pipeline Section from 116-N-1 to 116-N-3 Crib including concrete encased pipe bypass structure	Radioactive Process Sewer	100-NR-1	Not Documented	This site is the pipeline section from 116-N-1 to 116-N-3 Crib including the concrete encased pipe bypass structure. The western portion of this pipeline was located between 116-N-1 and the 1312-N Diversion Box. The effluent flowed through a 448 m (1,468 ft) long by 0.9 m (Diameter Nominal [DN] 900) (36 in.) diameter pipeline. Two pipelines continued on from the 1312-N Diversion Box to the north then eastward to the southwest end of the crib. One of the pipelines was a pipe encased concrete by-pass structure that ran parallel to the original. The bypass structure was built at the same time as the 1312-N Retention Basin (also known as the 1312-N LERF); however, neither was put into service. This portion of the pipeline 100-N-63:1, approximately 66 m (216.54 ft) west of 1213-N Diversion Box continuing to the southwest end of the 116-N-3 Crib, has been remediated and closed-out in CVP-2002-00002. For purposes of the CVP/closure report and consistent with the permitted TSD site designation, the 116-N-3 Crib and Trench, the 100-N-63:1 Pipeline and the bypass structure are collectively referred to as the 116-N-3 site.	Interim Closed Out	CVP-2002-00002 WSRF 2002-055	21-Jul-00	1-Apr-02	140,270	>4.6	Am-241	0.387U	999[c]	0.102	154
												Co-60	0.796	62400[c]	0.387	5580
												Cs-137	1.27	43100[c]	0.406	4900
												Eu-154	0.18U	0.211[c]	0.0603	8.7
												Eu-155	0.13U	130U[c]	0.0422	6.45
												H-3	N/A	2.57U[c]	N/A	-0.00726
												Ni-63	0.856U	6040[c]	-0.0622	1030
												Pu-239/240	0.137U	1730[c]	0.0282	258
												Sr-90	1.14	3710[c]	0.17	1460
												Hg	0.02U	N/A	0.02	N/A
												Nitrate	2.1	14.8[c]	1.24	3
100-N-63:2	100-N-63:2, Pipelines Between 109N, 105N, 107N, 1310N, 1322N, 1926N And 36" Process Drain to Outfall	Radioactive Process Sewer	100-NR-1	Not Documented	Pipelines between 109N, 105N, 107N, 1210N, 1322N, 1926N, and 36 in. process drain to outfall.	Accepted	Not Documented	N/A								

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
100-N-64	100-N-64, 100-N Reactor 105/109-N Cooling Water Effluent Underground Pipelines	Radioactive Process Sewer	100-NR-1	Not Documented	This site includes those underground pipelines that transported reactor cooling water from the 105-N Reactor facilities to the 116-N-4 (1300-N), the 1304-N Emergency Dump Basin and Tank respectively, the 107-N Filter Building and the pipelines from these facilities to the 1908-N Outfall Structure. It does not include the underground lines that discharge to the 1301-N (116-N-1) and/or 1325-N (116-N-3) Cribs that are addressed by a separate Waste Information Data System (WIDS) entry for the 105-N Reactor, 1314-N, 116-N-1, and 116-N-3 underground pipelines (site 100-N-63). The Emergency Dump Basin (116-N-4/1300-N) and the Emergency Dump Tank (1304-N) were designed to receive "single-pass" reactor cooling water in the case of an emergency. Both systems were used to periodically receive steam blowdown. The 1304-N Tank replaced the 1300-N Basin. This steam condensate normally contained low levels of radionuclide contamination and fission products. Overflow and drain lines to the 1908-N Outfall Structure are included in this waste site. However, the outfall structure is a separate waste site.	Accepted	Not Documented	N/A								
100-N-65	100-N-65, UPR-100-N-17 Interceptor Trench, Diesel Oil Interceptor Trench	Trench	100-NR-1	Not Documented	The site (UPR-100-N-17 Interceptor Trench, Diesel Oil Interceptor Trench) is a trench that was excavated along the Columbia River bank to intercept diesel oil before it could reach the river. In 1994, the trench was backfilled with material to the top of the adjacent berm. The trench was excavated as a result of an unplanned release of 303,000 L (80,000 gal) of diesel fuel that leaked from a pipeline within 166-N Tank Farm (See UPR-100-N-17). Several smaller unplanned releases also contributed to the need for the trench (see UPR-100-N-19 and UPR-100-N-20). Oil trapped in the trench was ignited and burned. A significant portion of the oil was thus removed before it could reach the river. No gross fuel oil contamination was found during placement of a characterization well on the berm in Fiscal Year 1994, but gross contamination was found in characterization wells to the south of the berm. The release dates for the Unplanned release UPR-100-N-17 occurred in 1966, UPR-100-N-20 occurred in 1985, and UPR-100-N-19 occurred in 1984.	Accepted	Not Documented	N/A								

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
100-N-66	100-N-66, 105-N/109-N Reactor Building Complex	Reactor	100-NR-1	137.77 × 141.73 × 21.34 (105-N)	The site is the 105-N Reactor Building and the 109-N Heat Exchange Building. The 105-N Building is a reinforced concrete and structural steel building with channeled steel siding. The reactor is contained within a reinforced concrete enclosure, which serves as a confinement zone capable of withstanding moderate overpressures. This enclosure also contains the control rod systems, inlet and outlet pipe galleries, exhaust fans, elevators for servicing the front and rear faces, a gallery beneath the reactor for various monitoring purposes, and receiving basin for spent fuel elements. Surrounding the reactor enclosure on three sides are rooms housing auxiliary facilities and supporting services. These include offices, common facilities, the main control room, electrical control rooms, shop area, ventilation supply rooms, gas dryer and cooler rooms, instrumentation rooms, metal preparation and storage facilities, spent fuel storage, examination facility, and transfer area. On the fourth side of the confinement enclosure, to the rear of the reactor, is the 109-N Heat Exchange Building, which shares a common wall with the 105-N Building. The 109-N Building is a reinforced concrete, structural steel building with channeled steel siding. It is immediately adjacent to and shares a common wall (south wall of 109-N) with the 105-N Building. The 109-N Building contains a large pipe gallery on the north side, which receives the primary reactor coolant system piping from the reactor for distribution into five separate cells each housing two large heat exchangers, a primary circulating pump and associated piping. A sixth cell contains a heat exchanger system for the moderator cooling system. The pipe gallery and steam generator cells are located in a reinforced concrete enclosure, which, as in the case of the reactor, defines a confinement zone.	Accepted	Not Documented	N/A							
				62.79 × 116.74 × 11.89 (109-N)	Located outside of the confinement zone are the pump drive systems, dump condensers for disposal of export steam, condensate return pumps, other auxiliary equipment, a small chemical laboratory, and water sampling and monitoring facilities. A service bay has facilities for decontaminating the primary coolant system and contains the heating and ventilation equipment, shop areas, office and common space.											

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
100-N-67	100-N-67, HGP Dumping Area	Dumping Area	100-NR-1	Not Documented	The site (HGP Dumping Area) is a pile of metal banding material, barbed wire, wire rope, concrete, and pipe. Some of the materials are partially buried. The waste appears to have been generated from the construction of the Bonneville Power Administration (BPA) powerlines. A pipe extends down the bank and is buried near the top of the bank. This pipe may have once functioned as an effluent pipe, but no hazardous or radioactive facilities were in this area. The pipe was dry at the time of the inspection in 1997. It was also dry in August 2000. The soil below the end of the pipe shows no discoloration.	No Action	WSRF 2000-057	N/A									
100-N-68	100-N-68, N Basin Low Level Radioactive Water Spill	Unplanned Release	100-NR-1	278.71 m^2	The intake hose to the Final Transfer Filtration system had split sometime between 2:00 to4:00 am, causing contaminated water from the basin to be released to the floor. The estimated amount of water released from the basin is approximately 1.36E+05 L (36,000 gal). The basin drains captured most of the water, however an estimated 7,600 L (2,000 gal) leaked under a set of roll-up doors and out of the building. This water spread onto the ground outside the 105-N Building, pooling on concrete and gravel surfaces (mostly in an area 6×9 m [20×30 ft]). On February 20, 1998, the areas contaminated by the January 7, 1998, unplanned release of basin water were capped. Both previously identified areas have asphalt covers on them. The site has been posted with contaminated area signs and the contamination has been temporarily stabilized with a fixative, tarps, and plywood.	Accepted	Not Documented	N/A									
100-N-69	100-N-69, 105-NB Stormwater Injection Well, Miscellaneous Stream No. 801	Injection/ Reverse Well	100-NR-1	0.56 diameter × 2.56 deep	The site is covered with a 0.56 m (1.8 ft) diameter steel grate and is 2.56 m (8.4 ft) deep. The drywell is constructed of concrete. The drain was installed to prevent stormwater from collecting in low areas. Flow rates to the drain are estimated to be less than 19 L (5 gal) per minute. No contaminated areas were observed at the time of the inspection.	Not Accepted	Discovery Site Evaluation Checklist	N/A								

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
100-N-7	100-N-7, 182-N Facility Liquid Unplanned Release (remediated)	Unplanned Release	100-NR-1	Not Documented	The site (182-N Facility Liquid Unplanned Release [Remediated]) consists of a concrete flume on the river bank that extends into the river. The release at this site was approximately 19 L (5 gal) of oil that was mixed with a continuous permitted water discharge. The oil was dispersed into the river with the rest of the permitted discharge from the flume. The flume is currently dry and there is no evidence of the release.	Not Accepted	Discovery Site Evaluation Checklist	N/A								
100-N-70	100-N-70, 1705-N Stormwater Injection Well, Miscellaneous Stream No. 802	Injection/ Reverse Well	100-NR-1	1.00 diameter × 1 deep	The site is covered with a 1 m (3.3 ft) -diameter steel grate at grade level and is constructed of concrete. The site is filled with gravel and is located in a depression. The site appears to be a drain for stormwater that collects in a depression from the surrounding area and the roof of 1705-N. The flow rates to the site are estimated to be less than 19 L (5 gal) per minute. No contaminated areas were observed at the time of the inspection.	Not Accepted	Discovery Site Evaluation Checklist	N/A								
100-N-71	100-N-71, 100-N Sewer System, Project 4546.010	Septic Tank	100-NR-1	Not Documented	This site was added to WIDS before the septic system was built; subsequently the project has been cancelled because of lack of funds (per Nolan Draper).	Not Accepted	Not Documented	N/A								
100-N-72	100-N-72, 107-N Building East Area Stormwater Runoff, Miscellaneous Stream No. 396	Injection/ Reverse Well	100-NR-1	Not Documented	The site is a concrete French drain, about 0.5 m (1.5 ft) in diameter, with an open metal grate cover. The bottom is about 0.3 m (1 ft) deep and only sand and cobbles are visible. A concrete trench, about 18 m (60 ft) long, drains the paved and graveled area north of the 107-N Building, and empties into this French drain. The trench prevents stormwater from flowing to the west, and down a steep slope in the area fenced for security exclusion. The area is posted with underground radioactive materials (URM) signs, like most of 100-N. This French drain receives stormwater only.	Not Accepted	Discovery Site Evaluation Checklist	N/A								
100-N-73	100-N-73, 107-N Building West Area Stormwater Runoff, Miscellaneous Stream No. 395	Injection/ Reverse Well	100-NR-1	Not Documented	The drain is a concrete structure with a steel lid, fed by a concrete trough running from north of the 107-N Building, along the base of the security fence. This miscellaneous stream drains stormwater from the area north and west of the 107-N Building and flows via a concrete trench to a drywell on the north side of the 181-N Pumphouse. It is designed to prevent erosion on the river bank that could otherwise be caused by stormwater.	Not Accepted	Discovery Site Evaluation Checklist	N/A								

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
100-N-74	100-N-74, 183-N Building Fire System Drain, Miscellaneous Stream No. 492	Injection/ Reverse Well	100-NR-1	Not Documented	The site is in a graveled lot on the north side of the 183-N Building. A fire system relief valve (site 100-N-75) extends about 1 m (3 ft) above the ground, and is surrounded by six steel barrier poles to protect it from vehicles. Two metal 10 cm (4 in.) pipes with handles for turning valves are next to the relief valve, but no pit is visible. When fire system piping is opened at the valve pit for repair, untreated water from the Columbia River (via the Hanford Site export water system) drains from pipes into the pit.	Rejected	WSRF 2000-100	N/A								
100-N-75	100-N-75, 183-N Building Fire System Relief Valve, Miscellaneous Stream No. 493	French Drain	100-NR-1	Not Documented	This site is a relief valve that releases during upset conditions in the plant fire system. Released water flows into a container, and overflows onto the ground. The water is from the fire control test system, which is clean, untreated river water from the Columbia River via the Hanford Site export water line.	Rejected	WSRF 2000-101	N/A								
100-N-76	100-N-76, 181-N Pumphouse French Drains	French Drain	100-NR-1	0.46 diameter × 1.22 deep	The site is two French drains; the drains were plugged with grout on June 13, 2001. The French drains were connected to each other underground, and provided steam condensate and stormwater drainage just east of the 181-N Pumphouse. These drains are believed to have been built to receive steam condensate blowdown. However, when the steam line was removed the drains were left behind, and drained excess stormwater. The French drains were plugged, abandoned, and closed in accordance with 40 CFR 144.82.	Rejected	WSRF 2001-048	N/A								

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
100-N-77	100-N-77, 100N River Effluent Pipeline, River Line from 1908-N Outfall	Radioactive Process Sewer	100-NR-1	121.92	This site consists of a 260 cm (102 in.) pipeline that exits the northwest face of the outfall (1908-N) to the Columbia River. The river line is located in the Columbia River, adjacent to 100-N. The line extends into the main channel of the river from the 1908-N Outfall. The 100-N-77 river effluent pipeline originates from, and is perpendicular to, the face of the 1908-N outfall structure. The pipeline extends 118 m (386 ft) from the outfall face before turning 30 degrees upstream, and continuing for another 148 m (485 ft) to its discharge point in the Columbia River. The river effluent pipeline received more than 2 million cubic meters per day of single pass raw river water from the circulating raw water (CRW) system, and discharged it to the river. The CRW supplied once-through untreated river water to 16 dump condensers and 7 surface condensers. The water was used to cool the secondary cooling water for the N Reactor from the 1908-N Seal well (1908-N Outfall) and discharged it to the Columbia River. The outfall line is a NPDES discharge point, outfall number 009. During a site visit in 2005, the structure was found to be intact. Per the requirements of Tri-Party Commitment C-106-06B for DOE/RL to "Submit an engineering evaluation of the final disposition of the river pipelines and outfall structures to EPA and Ecology" by July 31, 2005, the 100-N-77 river effluent pipeline, along with other river effluent pipelines in the 100 Area, will be addressed through an Explanation of Significant Differences (a CERCLA decision document).	Accepted	Not Documented	N/A							

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
100-N-77:1	100-N-77:1, 1908-N Outfall	Outfall	100-NR-1	111.86 × 3.66	The site consists of a spillway (also referred to as an emergency outfall) and is constructed of reinforced concrete. The flume was used when the river lines were blocked, damaged, or undergoing maintenance, or when the flow rate exceeded the capacity of the lines. The spillway was an emergency discharge point for the 1908-N Outfall structure. It was planned to be used only if the 100-N-77 river effluent pipelines were blocked, damaged, or undergoing maintenance. There is no corroborated physical or historical evidence that the spillway was ever used. Originally, the 1908-N Outfall, Spillway (Flume), and river pipelines were entered into WIDS as one site. Due to remediation project needs the outfall structure (1908-N), the River Effluent Discharge lines (100-N-77) and the spillway (flume) (100-N-79) have documented as separate waste sites. The 1908-N Outfall extends from the outfall under a service road, and discharges at the low water mark on the river shore 112 m (367 ft) from the outfall. During a site visit on February 7, 2005, the spillway and outfall were found intact.	Accepted	Not Documented	N/A							
100-N-78	100-N-78, 1716-NE Maintenance Garage, HGP SWMU No. 8	Maintenance Shop	100-NR-1	Not Documented	The 1716-NE Maintenance Garage (SWMU No. 8) was located to the east of the former 185-N Building. The 1716-NE Maintenance Garage was used for vehicle maintenance. The garage had three vehicle bays each containing a floor drain that led to the 100-N-3 Maintenance Garage French Drain (SWMU No. 9). Following removal of the building and concrete foundation no samples were collected from underlying soils. There were no visual indications (i.e., soil stains or discoloration) of any releases from the building to the underlying soil.	Interim Closed Out	HGP-CVP-SWMUs 5, 6, 7, 8, 9, & 10 WSRF 2004-060	2003	2004	N/A		Diesel range petroleum hydrocarbons	25 U	N/A	25 U	N/A

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
100-N-79	100-N-79, 1908-N Spillway, 1908 N Outfall Structure, 100-N-77:1 Flume	Outfall	100-NR-1	111.86 × 3.66	The site (1908-N Spillway, 1908 N Outfall Structure, 100-N-77:1 Flume) consists of a spillway (also referred to as an emergency outfall) and is constructed of reinforced concrete. The spillway was an emergency discharge point for the 1908-N Outfall structure. It was planned to be used only if the 100-N-77 river effluent pipelines were blocked, damaged, or undergoing maintenance. There is no corroborated physical or historical evidence that the spillway was ever used. There is anecdotal evidence that the spillway was never intended or expected to be used, as it was never permitted. An unknown level of radioactive contamination exists within the structure because the discharge lines were associated with the reactor's secondary steam system.	Accepted	Not Documented	N/A							
100-N-8	100-N-8, 108-N Facility, 108-N CUF	Loading Dock	100-NR-1	Not Documented	The site (108-N Chemical Unloading Facility) was used for offloading, storage, and transfer of 93% sulfuric acid and 50% sodium hydroxide solutions received by railroad car or tank truck. Three UPRs are associated with this site. Acid and caustic spill sites are not contaminated based on natural buffering and dissociation processes in the soils.	Rejected	WSRF 2000-050	N/A							
100-N-80	100-N-80, River Line from 1908-NE Outfall	Process Sewer	100-NR-1	Not Documented	This site includes one, 335 cm (132 in.) (2 cm [0.75 in.] wall thickness) steel pipeline, extending from the face of the 1908-NE Outfall into the main channel of the Columbia River. The river effluent pipeline received single pass raw river water, which had passed through the Hanford Generating Plant (HGP) condensers, as well as waste water from the 100-N-1 Settling Basin. The pipeline contains seven 20 cm (8 in.) vents along its length, and discharges to the river via four 3.4 m (11 ft) outlets. The pipeline is buried along its entire length to a depth of at least 1.2 m (4 ft) with soil, gravel, and riprap.	Accepted	Not Documented	N/A							
100-N-81	100-N-81, 100-N Kaiser Shops Garnet Sandblasting Material	Dumping Area	100-NR-1	Not Documented	Not Specified	Accepted	Not Documented	N/A								
100-N-82	100-N-82, 100-N Decontamination Pad	Unplanned Release	100-NR-1	Not Documented	Not Specified	Accepted	Not Documented	N/A								
100-N-83	100-N-83, Two Contamination Areas Found Near 116-N-1	Unplanned Release	100-NR-1	Not Documented	The site consists of two contamination areas found near 116-N-1.	Accepted	Not Documented	N/A								

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
100-N-84	100-N 100-N Miscellaneous Pipelines	Product Piping	100-NR-1	Not Documented	This site consists of all miscellaneous pipelines in 100-N that were identified during the Orphan Site Evaluation (OSE) process and not previously tied to an existing waste site. The site consists of two groups of piping and their underlying soil: (1) potentially contaminated product pipelines and (2) service water pipelines and associated features (manholes, storm drains, valve boxes, etc.).	Accepted	Not Documented										
100-N-84:1	100-N-84:1 100-N Area Raw Water Pipelines	Product Piping	100-NR1	Not Documented	The 100-N area raw water pipelines includes: low pressure water, raw water, raw water return, raw water supply, raw water supply high and low pressure, emergency raw water supply, sprinkler, vent, fire line, irrigation, fog, and fish line pipelines.	Accepted	Not Documented	2008	2009	N/A	N/A	N/A				
100-N-84:2	100-N-84:2 100-N Area Fuel and Foam Pipelines	Product Piping	100-NR-1	Not Documented	Two fuel oil unloading, storage and transfer systems were used in 100-N.	Accepted	Not Documented	N/A	N/A	N/A						
100-N-84:3	100-N-84:3 100-N Area Filtered and Potable Water Pipelines	Product Piping	100-NR-1	Not Documented	The 100-N area filter and potable water pipelines includes makeup water, filter water, demineralized water, and potable water pipelines.	Accepted	Not Documented	2008	2009	N/A						
100-N-84:4	100-N-84:4 100-N Area Steam and Condensate Pipelines	Product Piping	100-NR-1	Not Documented	The 100-N area steam and condensate pipelines includes steam, condensate, and injection and vacuum pump water.	Accepted	Not Documented	2008	2009	N/A	N/A	N/A				
100-N-84:5	100-N-84:5	Product Piping	100-NR-1	Not Documented	The 100-N area sanitary pipelines includes sanitary water and sewer, storm drains, and disposal field pipelines.	Accepted	Not Documented	N/A	N/A	N/A	N/A	N/A				
100-N-84:6	100-N-84:6 100-N Area Chemical and Process Sewer Pipelines	Product Piping	100-NR-1	Not Documented	100-N area Chemical and Process Sewer Pipelines include: Chemical waste, DMV waste, drain cold, dummy disposal line, Miscellaneous chemical drain, radioactive drain, chlorine, flush, and sample pipelines.	Accepted	Not Documented	2008	2009	N/A	N/A	N/A				
100-N-84:7	100-N-84:7 100-N Area Unidentified and Other Miscellaneous Pipelines	Product Piping	100-NR-1	Not Documented	The 100-N-84:7 waste site pipelines include sections of various diameter pipelines located within the 100-NR-1 operable unit, which could not be positively identified based on review of historical documentation. These pipelines include those described as unidentified or multitube.	Accepted	Not Documented	N/A	N/A	N/A	N/A	N/A				

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
100-N-85	1716-N Gas Station Fuel Tanks	Unplanned Release	100-NR-1	Not Documented	This site consists of soil contaminated with gasoline and diesel which remained after the removal of two underground fuel storage tanks located at the former 1716-NA Service Station. The soil is contaminated to a depth of at least 11 m (36 ft) below grade, although the actual depth is not known (WHC-SD-EN-TI-136). The lateral extent of the contamination is not documented.	Accepted	Not Documented										
100-N-86	151-N Substation Transformer and Oil Circuit Breakers	Electrical Substation	100-NR-1	Not Documented	This site is the 230-13.8 kv transformer concrete support pedestals and underlying soils, and the concrete pad and underlying soils for the three oil circuit breakers (OCBs) that were located 45 m (148 ft) to the east. It does not include the 151-N Electrical Substation Building or the 13.8-4.16kv transformer, pad, and underlying soils. These were demolished and removed by the D4 Project and documented with a D4 Project Soils and/or Below Grade Structures Completion form (D4-100N-0002).	Accepted	Not Documented										
100-N-87	116-N Ventilation Stack Piping and French Drain	French Drain	100-NR-1	Not Documented	The site consists of the 116-N ventilation stack drain piping and French drain. The site was part of the original 1962 construction, and was in use until the N-Reactor was ordered permanently shut down in 1991.	Accepted	Not Documented									
100-N-88	1143-N French Drain	French Drain	100-NR-1	Not Documented	The site consists of a 0.61 m (24 in.) "catch basin" (French drain) and its associated 5.1 cm drain cold (DR) (2 in.) pipeline and underlying soil (drawing H-1-45007, Sht 6). Until about 1997, a sink within the facility discharged to this site. The potential existed for the site to have inadvertently received paint solvents and other hazardous liquids from the activities within the building. The sink was removed about 1997, and discharges to this site ceased.	Accepted	Not Documented									
100-N-89	117-NVH French Drain	French Drain	100-NR-1	Not Documented	The French drain is a 61 cm (24 in.) concrete pipe buried to 91 cm (36 in.). The top of the pipe is at grade and it is filled with gravel. An additional 46 cm (18 in.) of gravel is beneath the pipe. A metal plate covers the pipe (H-1-50093).	Accepted	Not Documented									

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
100-N-9	100-N-9, 120-N-5 Facility Liquid Unplanned Release 1 (08/07/87)	Unplanned Release	100-NR-1	Not Documented	The site (120-N-5 Facility Liquid Unplanned Release 1 [08/07/87]) is associated with 120-N-5, which is a concrete-lined neutralization pit and acid/caustic transfer trench. On August 7, 1987, sulfuric acid was found leaking outside of the 163-N Plant extending to an area of the 120-N-5 Transfer Trench that had not yet been treated with a polymer coating. The acid had corroded away the exposed concrete, and some of the liquid may have reached the soil. The extent of the release is unknown. There is no remaining evidence of the spill at the site. Acid and caustic spill sites are not contaminated based on natural buffering and dissociation processes in the soils.	Rejected	WSRF 2000-051	N/A									
100-N-90	100-N Reactor Rod Caves	Storage	100-NR-1	Not Documented	The Rod Cave is two 30.5 cm (12 in.) carbon steel pipes buried in the earth berm on the north side of the 117-N Air Filter Building. The west ends of the pipes have aluminum covers; the east ends are buried in the berm. Two vertical pipes for monitoring radiation levels extend through the berm.	Accepted	Not Documented									
100-N-91	100-N Battery Debris	Dumping Area	100-NR-2	Not Documented	The site consists of a 0.6 m (2 ft) -diameter battery dump. The exterior of the batteries has degraded and the contents are mixed into the soil. There is no vegetation growing in the affected area.	Accepted	Not Documented									
100-N-92	100-N Stain Area No. 1	Dumping Area	100-NR-3	Not Documented	The site consists of a 3 m (10 ft) diameter area stained with a white substance resembling dried paint and two 4 L (1 gal) cans.	Accepted	Not Documented									
100-N-93	100-N Stain Area No. 2	Dumping Area	100-NR-4	Not Documented	The site consists of potentially contaminated soil. It includes concrete, metal, glass debris, stained soil, suspected friable asbestos, and garnet sand with areas lacking in vegetation.	Accepted	Not Documented									
100-N-94	100-N Oil Filters No. 1	Dumping Area	100-NR-5	Not Documented	The site consists of the underlying soil and approximately 50 oil filters.	Accepted	Not Documented									
100-N-95	Hanford Generating Plant (185-N) Septic Tank	Septic Tank	100-NR-6	Not Documented	This feature consists of a septic tank, associated piping, and underlying soil.	Accepted	Not Documented									
100-N-96	100-N Military Camp Disposal Pits	Dumping Area	100-NR-7	Not Documented	This site consists of three separate suspect disposal pits located southwest of the 100-N-47 military camp, identified from a 1957 aerial photograph. The suspect disposal pits were located outside the boundary of the military camp.	Accepted	Not Documented									

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
100-N-97	100-N Oil Filters No. 2	Dumping Area	100-NR-8	Not Documented	This site consists of underlying soil and three oil filters. There is no vegetation growing within the release area.	Accepted	Not Documented									
100-N-98	100-N Stain Area No. 3	Dumping Area	100-NR-9	Not Documented	The site consists of two locations where the surface is stained and no vegetation is growing in the affected area. One location (OSE – N-193) consists of multiple stained spots in a 30 m (98.4 ft) diameter area. The other location (OSE – N-194) is a single stained spot approximately 3 m (9.8 ft) in diameter.	Accepted	Not Documented									
100-N-99	100-N Oil Filters No. 3	Dumping Area	100-NR-10	Not Documented	The site consists of two locations where oil filters were discarded. The affected areas are devoid of vegetation and appear stained.	Accepted	Not Documented									
116-N-1	116-N-1, 1301-N Liquid Waste Disposal Facility, 1301-N Crib and Trench	Crib	100-NR-1	38.1 × 88.4 × 1.5 (crib) 15.3 × 488 × 3.7 (trench)	The site (1301-N Liquid Waste Disposal Facility, 1301-N Crib, and Trench) includes a large crib and a "zig-zag" trench, which was added in 1965 to enhance percolation capacity. Both facilities operated in tandem after 1965. The crib and trench received radiologically contaminated water from the 105-N Reactor basin floor drains and the 109-N floor drains. The effluent contained activation and fission products as well as small quantities of corrosive liquids and laboratory chemicals. At times, the effluent consisted of water from the primary reactor coolant system, the periphery reactor cooling system and decontamination wastes from these systems. Operational records indicate cobalt-60, strontium-90, and cesium-137 were disposed of at this crib. In 1982, routine sampling of the riverbank springs indicated an increase in the radionuclide concentrations reaching the Columbia River. This condition indicated a decrease in the effectiveness of the 116-N-1 to retain radionuclides in the soil column. This led to the construction of the 116-N-3 Crib. The 1995 Limited Field Investigation (DOE/RL-93-80 concluded that the maximum levels of radionuclide contamination (based on field screening and geophysical logging) are expected to be found at depths between 18 and 20 m.	Interim Closed Out	CVP-2006-00004 WSRF 2006-018	N/A		333,528 metric tons	Trench 6.5 m (21.3 ft) Crib 4.5 m (14.8 ft)	Am-241	3.99	149	0.55	35
												Co-60	0.514	1,230	0.121	310
												Cs-137	0.83	21,600	0.36	5,100
												Eu-154	0.17 U	23.6	0.71 ND	7.3
												Eu-155	0.25 U	9.8 U	0.069 ND	1.9
												H-3	NC	51.1	NC	16
												Ni-63	2.84 UJ	788	0.97 ND	170
												Pu-239/240	0.074 U	154	0.026 ND	41
												Sr-90	0.64	2110	0.18	931
												Cr (total)	NC	31.7	NC	14
												Cr (VI)	NC	2.96	NC	2.96
												Nitrate (as Nitrogen)	27.10	102 D	17	68
												Hg	0.02 U	NC	0.02 ND	NC

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
116-N-2	116-N-2, 1310-N Chemical Waste Storage Tank, The Golf Ball, 1310-N Waste Storage Area	Storage Tank	100-NR-1	3.4E+06 L	The site (1310-N Chemical Waste Storage Tank [Golf Ball]) consists of piping, pumps, a transfer tank (commonly referred to as the silo), and a large, spherical storage tank. The site was used as a collection tank for N Reactor primary piping decontamination wastes. The tank was used to temporarily store and neutralize acidic decontamination waste from the internal decontamination of the N Reactor primary loop through an underground pipeline. An additional, small scale transfer line enters the tank from the N Reactor Building. The primary loop was decontaminated every 3 to 5 years, resulting in approximately 2.3E+06 L of contaminated solution per decontamination. The decontamination solutions contained approximately 80,000 L of 70% phosphoric acid and 180 kg (400 lb) of diethylthiourea. The solutions were neutralized with sodium hydroxide in the tank. From 1968 to 1972, the neutralized solutions were pumped into trucks parked on the east side of the containment area and transported to 200 Area for disposal. After 1972, the solution was sent to the 1314-N Liquid Waste Loadout Station. The solutions were also discharged to the 116-N-1 Crib, if necessary. Three unplanned releases (UN-100-N-5, UN-100-N-25, UPR-100-N-38) of decontamination solution occurred at this site, which cumulatively totaled 3.43E+05 L.	Accepted	Not Documented	N/A							

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
116-N-3	116-N-3, 1325-N Liquid Waste Disposal Facility, 1325-N Crib and Trench	Crib	100-NR-1	76.2 × 73.15/ 914.4 × 3.05 × 2.13	The 116-N-3 Crib (1325-N LWDF) was designed for the disposal of liquid waste percolation through the soil column. It was built to replace the 116-N-1 Crib and first received N Reactor effluent in 1983. The 116-N-3 Trench was put into service in September 1985 to provide additional disposal capacity. Effluent reportedly never overflowed the first earthen dam in the trench. The LWDF has not received waste since February 1987 and was closed under interim status. During the first few months of operation, the crib overflowed three times. Because of the low percolation rates, the 116-N-1 and 116-N-3 Cribs were used alternately between 1983 and 1985. The trench associated with this unit was put into service in September 1985 to add additional percolation area. The 116-N-3 Crib then became the primary liquid disposal facility and the 116-N-1 Crib was used only as an emergency discharge crib. The average monthly flow to 116-N-3 Crib during normal N Reactor operations was 5,300 L (1,400 gal) per minute).	Interim Closed Out	CVP 2002-00002 WSRF 2002-055	21-Jul-00	1-Apr-02	140270	>4.6	Am-241	0.387U	999[c]	0.102	154[c]
												Co-60	0.796	62400[c]	0.387	5580[c]
												Cs-137	1.27	43100[c]	0.406	4900[c]
												Eu-154	0.18U	0.211[c]	0.0603	8.7[c]
												Eu-155	0.13U	130U[c]	0.0422	6.45[c]
												H-3	N/A	2.57U[c]	N/A	-0.00726[c]
												Ni-63	0.856U	6040[c]	-0.0622	1030[c]
												Pu-239/240	0.137U	1730[c]	0.0282	258[c]
												Sr-90	1.14	3710[c]	0.17	1460[c]
												Hg	0.02U	N/A	0.02	N/A
												Nitrate	2.1	14.8[c]	1.24	3[c]

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
116-N-4	116-N-4, 1300-N Emergency Dump Basin	Retention Basin	100-NR-1	39.62 × 24.38 × 809.37	The site consists of the 1300-N Emergency dump basin. The 116-N-4 Emergency Dump Basin is a rectangular shaped, outdoor, concrete storage basin with a 10.7 cm (0.188 in.) carbon steel liner. The 116-N-4 Emergency Dump Basin was originally designed to receive emergency single pass cooling water from N Reactor. In the late 1960s, the unit was determined to be insufficient for its original purpose because it did not have adequate capacity for the volume of coolant used during an emergency cooling operation. It was replaced with the 1304-N Emergency Dump Tank (EDT) in 1973. From 1973 to 1987, 116-N-4 received contaminated liquid generated during the periodic blowdown of the steam generators located in the 109-N Building. This condensate contained low levels of radioactive contaminants. It also received radioactive waste from the N Reactor Lift Station. Since the shutdown of N Reactor in 1987, approximately 2.0E+06 L (7.5E+05 gal) of water has been maintained in the basin to cover the layer of sludge in the bottom of the basin to prevent it from drying and causing airborne contamination. Nonfiltered river water has been added as needed to maintain an adequate water level. The basin leaked to the soil at the northeast and northwest corners of the basin during the early 1980s.	Accepted	Not Documented	N/A							

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
116-N-8	116-N-8, 163-N Mixed Waste and Hazardous Waste Container Storage Pad, 1330-N, 116-N-8 Storage Pad	Storage Pad	100-NR-1	46.33 × 18.29	The pad is an active pad listed on the Environmental Restoration Contractor's 90 Day Pad Inventory List as the 1330N 90 Day Accumulation Areas. This method for managing active 90 Day Storage Pads is in agreement with Section 2.0, "Scope," of TPA-MP-14, and thus tracking these sites through WIDS is not necessary. However, once the site becomes inactive, the WIDS summary report will be updated. The 90 Day Storage Area and all dangerous waste are managed in compliance with WAC 173-303-200(b)(i) and will be closed in compliance with WAC 173-303-630(10). Containers are stored on a curbed and fenced concrete pad. The pad is covered by an open metal shed, divided into three storage areas each with its own locked gate. The entire unit is approximately 45 × 18 m (150 × 60 ft). A small cabinet in front holds personal protective equipment and spill response materials. The front of the unit is an asphalt parking/driving area; the sides and back are gravel. No spills have been recorded at this site. No stains are visible on the concrete.	Rejected	Not Documented	N/A						

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
118-N-1	118-N-1, 100-N Area Silos, 100-N Area Spacer Silos, 118-N, 1303-N Spacer Silos, 1303-N Radioactive Dummy Burial Facility	Silo	100-NR-1	49.00 × 11.00	The site was a temporary storage facility for contaminated fuel spacers. The silos are partially underground with approximately 1.5 m (5 ft) of the structures above ground covered with soil. The soil mound had scant vegetation growing on it and a single vent stack protruded from the mound. A chain link fence surrounded the site on three sides and was posted with "Contamination Area, Underground Radioactivity and Soil Contamination Area" signs. The western side is barricaded with a 2.1 m (7 ft) concrete wall. Following surface stabilization in 1998, the site was posted with Underground Radioactive Material signs. The site contains three concrete silos, each 4.9 m (16 ft) in diameter. Periodically, the contents were shipped to the 200 Area Burial Grounds for permanent disposal. Two of the silos are open bottomed. The fence at the northwestern portion of the site was damaged and a soil contamination area was posted outside the damaged portion of the fence. When removing spacers in 1984, two fire hoses were used to spray water into the unit to prevent airborne contamination. This practice had the potential for washing radionuclides into the soil. No water has been released to this facility since 1984. In 1990, paint was used instead of water for contamination control. Groundwater monitoring wells in close proximity to the site are routinely sampled.	Accepted	Not Documented	N/A							

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
120-N-1	120-N-1, 1324-NA Percolation Pond	Pond	100-NR-1	2,694.19 m^2	The 120-N-1 site was co-located with 100-N-58, 120-N-2 sites in 100-N in the 100-NR-1 Operable Unit. In 1977, the 120-N-1, 120-N-2, and 100-N-58 sites were initially constructed as the East Percolation Pond and North and South Settling Ponds, respectively. 100-N-58 and 120-N-1 were unlined ponds and 120-N-2 was originally unlined, but was reconfigured in 1986 with a liner. These ponds received 163-N anion/cation regeneration effluent as well as the 183-N Filtered Water Plant filter backwash effluent. In 1982, because of pond percolation problems, the 183-N filter backwash was rerouted to an effluent disposal pond (130-N-1). During this time period, the 100-N-58 site was backfilled. The site was remediated in September/October 2000 and is closured per WSRF 2001-093 and CVP 2001000021. Ecology revised the post-closure groundwater monitoring measures for the site as of 5/26/05. Closure performance standards were established by Ecology, in concurrence with the U.S. Department of Energy, Richland Operations Office. These performance standards are documented in the 100-NR-1 Treatment, Storage, and Disposal Units Corrective Measures Study/Closure Plan (DOE/RL-90-22) and the Remedial Design Report/Remedial Action Work Plan for the 100-NR-1 Treatment, Storage, and Disposal Units (RDR/RAWP) (DOE/RL-2000-16). While sites 120-N-1, 120-N-2, and 100-N-58 are not included in a *Comprehensive Environmental Response, Compensation, and Liability Act of 1980* (CERCLA) record of decision (ROD) corrective action activities have been documented in a CVP (CVP-2001-00021).	Closed Out	CVP 2001-00021 WSRF 2001-093	N/A	N/A	N/A	N/A	Ba	93.7	N/A	86.9	N/A
												Cr (total)	14.6	N/A	10.5	N/A
												Cu	31.5	N/A	16.4	N/A
												Pb	6.4	N/A	4.4	N/A
												Hg	0.37	N/A	0.05	N/A
												Ni	17.6	N/A	13.5	N/A
												Zn	94.4	N/A	53.4	N/A
120-N-2	120-N-2, 1324-N Surface Impoundment	Surface Impound-ment	100-NR-1	42.67 × 21.34 × 4.57	The 120-N-2 site (1324-N Surface Impoundment) was originally unlined, but was reconfigured in 1986 with a double-lined basin was equipped with a leak detection and leachate collection system. Its design capacity was 1.605E+06 L (4.24E+05 gal) and was used to neutralize acid and caustic regeneration effluent from the 163-N Demineralization Plant, which received 163-N anion/cation regeneration effluent as well as the 183-N Filtered Water Plant filter backwash effluent.	Closed Out	CVP-2001-00021 WSRF 2001-093	N/A	N/A	N/A	N/A	Ba	93.7	N/A	86.9	N/A
												Cr (total)	14.6	N/A	10.5	N/A
												Cu	31.5	N/A	16.4	N/A
												Pb	6.4	N/A	4.4	N/A
												Hg	0.37	N/A	0.05	N/A
												Ni	17.6	N/A	13.5	N/A
												Zn	94.4	N/A	53.4	N/A
												Sulfate	135	N/A	55.7	N/A

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
120-N-3	120-N-3, 163-N Neutralization Pit and French Drain	French Drain	100-NR-1	10.2 × 2.8 × 2.4	The site (163-N Neutralization Pit and French Drain) measures 10.2 m (33.3 ft) by 2.8 m (9 ft) is covered with plywood covers and a portion of the 163-N Neutralization Pit is covered with a concrete slab and metal shed. Intermittent small releases of sulfuric acid and sodium hydroxide from the 163-N Demineralized Water Treatment Plant day-storage tanks were disposed to the soil at this location. The alkaline Hanford soils acted as a buffer to neutralize acidic wastes. In 1987, the unit was characterized to determine the presence or absence of hazardous materials. Acidic and caustic wastes were found. Ten to 15 cm (4 to 6 in.) of soil were removed and replaced with clean fill. In May 1988, the drain lines were rerouted to a sealed containment.	Accepted	Not Documented	N/A							

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
120-N-4	120-N-4, 1310-N Hazardous Waste Storage Area, 1310-N Waste Oil Storage Pad, 1310-N Non-Hazardous Waste Pad, 1524-N	Storage Pad	100-NR-1	30.48 × 22.86	The site (1310-N Hazardous Waste Storage Area) was a concrete surrounded with a concrete berm (curb) and locked chain-link fence. Outside the pad, the ground surface is gravel. A small open shed is in the southwest corner of the pad. The site is posted as a Radioactive Materials Area, and is also posted "Contaminated Lead Storage Area (For Re-Use)." The area contain (April 12, 2000) several wrapped objects marked with radioactive warning signs. The unit stored waste held in drums and containers from 1985 to 1989. The waste oil drums have been removed. The pad is now used (as of April 12, 2000) to store lead-lined burial casks and radioactive materials. It is no longer maintained on any <90 Day Storage Pad lists. Waste sites 100-N-26 and 120-N-4 were impacted by a raw water pipeline break on December 11, 2008. During the removal of the concrete pad at the 1524-N Hazardous waste storage facility on December 11, 2008 an unknown 1.5 in. tap into the export water line was inadvertently contacted. A rupture of the 12 in. export water line and a release of at least 50,000 gal of raw water onto the surrounding area resulted. A temporary berm was constructed around the area using excess clean 100 Area Borrow Pit material to contain the release and control potential spread of radiological contamination associated with the 1524-N pad. Once the water line was turned off the water in the area immediately percolated into the ground. In-process and post-event surface soil radiological field survey results did not find any contamination spread as a result of the water release. A follow-up review of nearby monitoring wells as well as the standard waste site confirmatory sampling will be used to ascertain potential impacts/conditions.	Accepted	Not Documented	N/A							

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
120-N-5	120-N-5, 108-N/163-N Transfer Line and Neutralization Pit	Product Piping	100-NR-1	220 (pipe) 1.22 × 3.05 (pit)	The site (108-N/163-N Transfer Line and Neutralization Pit) is a pipe trench that is located between the 108-N and the 163-N Buildings. The site transfers sulfuric acid and sodium hydroxide from the 108-N Chemical Unloading Facility to the 163-N Water Demineralization Plant for use in water treatment. The Transfer Line and Neutralization Pit is a trench (encasement) that contains two transfer lines that run between the 108-N and the 163-N Buildings. The concrete neutralization pit is designed to receive waste spills from within the encasement. When releases occurred within the trench, each spill was neutralized and pumped to the adjacent clearwell overflow sump. In 1976, the pit plugged and liquid waste backed up to the piping level, corroding the caustic and acid drain lines. In 1987, the Neutralization Pit was replaced and 167.3 metric tons (184 tons) of surrounding soil was removed for disposal offsite as hazardous waste (Cramer 1986). No sampling or other information is provided to know why the soil was disposed as hazardous waste. The neutralization pit was replaced after it was found to be leaking into the surrounding soil. The replacement pit was identical to the original one except that its inner surface was lined with polymer concrete, as was the pipe trench. Corroded piping was cut out and replaced, and new drain valves were installed. See UPR-100-N-34, UPR-100-N-15, 100-N-9, 100-N-10, and 100-N-11, which are all unplanned releases associated with this neutralization pit. Spilled sulfuric acid and sodium hydroxide have been neutralized or buffered by the soil and no longer exist in the soil as hazardous substances.	Rejected	WSRF 2000-096	N/A							

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
120-N-6	120-N-6, 108-N Acid Tank Vent French Drains	French Drain	100-NR-1	0.91 × 0.61	This site (108-N Acid Tank Vent French Drains) consisted of five French drains, which were removed in 1988. Ten to 15 cm (4 to 6 in.) of surface soil were also removed and replaced with clean fill. Samples were taken in 1988 from each of the French drains and analyzed for metals. The results of the analyses showed no levels of concern (the full results are shown in the Field Work section). No evidence of the former French drains remains. Three French drains were designed to receive inadvertent overflows and condensate from the three sulfuric acid storage tanks located south of the 108-N Building. Two other French drains were designed to receive tank vent overflows and condensate from the transfer tank, which was located in a concrete pit just west of the 108-N Building. Unknown quantities of sulfuric acid tank overflows and condensate were discharged to the drains. The drains were packed with limestone to neutralize the acid before entering the soil column. The sulfuric acid and sodium hydroxide spills at these sites were unused industrial-grade solutions that did not contain any process contaminants since the spills occurred on the supply side of the system. Acid and caustic spill sites are not contaminated based on natural buffering and dissociation processes in the soils. An unplanned release of an unknown quantity of soda ash (soda ash is purified sodium carbonate) sufficient to cover a 6.1 × 9.2 m (20 × 30 ft) area occurred in 1981. Soda ash was used to neutralize acid spills. Any remaining amounts of this material would have been removed with the French drains and the surrounding soil in 1988.	Rejected	WSRF 2000-097	N/A							

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
120-N-7	120-N-7, 108-N Acid Unloading Facility French Drain	French Drain	100-NR-1	1.22 × 0.91	The site (108-N Acid Unloading Facility French Drain) was used to collect small releases of sulfuric acid from the overhead transfer boom hose coupling which offloaded sulfuric acid from railroad tank cars or tank trucks. A lead funnel and pipe directed the small releases to the French drain. The unit received unknown amounts of sulfuric acid in intermittent discharges. Each discharge is estimated to have averaged less than 3.8 L (1 gal) of liquid. The sulfuric acid releases were unused industrial-grade products and did not contain any process contaminants since the releases occurred on the supply side of the reactor. The hazardous substances (acids) are no longer present due to natural neutralization processes. The concentrated acid may have etched lead from the funnel and pipe as it discharged to the French drain. This unit was characterized to determine the presence or absence of hazardous constituents in 1987. The *Hanford Site Waste Management Units Report: Waste Management Technology* (DOE/RL-88-30) reports that acid and lead waste were found at the site. A handwritten note dated 4/27/1987 reports the pH result for the sample as less than one. At the bottom of the note is the sentence "working on the metals." The metal results have not been located, and the only indication of a potential problem is a note in Cote (1994) that lead wastes were found at the site. The corrective measures study report for 100-N recommended no action for this site because of the natural attenuation of acid in the Hanford Soil. The alkaline Hanford soils act as a buffer to neutralize acidic wastes. The study does not address the potential for lead in the French drain.	Accepted	Not Documented	N/A							

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
120-N-8	120-N-8, 163-N Sulfuric Acid Tank Vent French Drain	French Drain	100-NR-1	Not available	The site (163-N Sulfuric Acid Tank Vent French Drain) is a French drain used to receive overflow of sulfuric acid from the 163-N demineralization plant sulfuric acid day tank. The unit was constructed of clay pipe filled with limestone to neutralize the sulfuric acid releases. The sulfuric acid and sodium hydroxide spills at these sites were unused industrial-grade solutions that did not contain any process contaminants since the spills occurred on the supply side of the system. Acid and caustic spill sites are not contaminated based on natural buffering and dissociation processes in the soils. The French drain was removed in 1988 and the site has been covered with gravel. The drain line was rerouted to sealed containment. There is currently no evidence of the former French drain at the site. The French drain was characterized in 1988 to determine the presence or absence of hazardous materials. No hazardous substances were found. There are no documented unplanned releases associated with the unit.	Rejected	WSRF 2000-102	N/A								
124-N-1	124-N-1, 124-N-1 Septic Tank, 100-N Sanitary Sewer System No. 1	Septic Tank	100-NR-1	Not Documented	This site (124-N-1 Septic Tank) supports the 163-N Water Treatment Building. This sanitary sewer system remains active. This unit receives approximately 5,300 L/day (1,400 gal/day) of sanitary sewage. Sanitary wastes entered the septic tank through a 10 cm (4 in.) vitrified clay pipe connecting the septic tank to the cesspool.	Accepted	Not Documented	N/A								
124-N-10	124-N-10, 124-N-10 Sanitary Sewer System, 100-N Central Sewer System No. 10, Project H-677, 100-N Sewage Lagoon	Sewage Lagoon	100-NR-1	250.77 × 67.06	The site (124-N-10 Sanitary Sewer System) consists of a three pond sewage lagoon facility, a server trunk line and other pipelines, two lift stations, new manholes, and associated sewer system instrumentation and annunciation capability. The site has received domestic wastewater sewage from 100-N and domestic sewage pumped from septic tanks throughout the Hanford Site. Incidental solids (rags, scum, and other debris) are removed from the system and disposed of as solid waste at an approved disposal site. The discharge from the infiltration pond percolates down to the groundwater.	Accepted	Not Documented	N/A								

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
124-N-2	124-N-2, 124-N-2 Septic Tank, 100-N Sanitary Sewer System No. 2	Septic Tank	100-NR-1	Not Documented	The unit (124-N-2 Septic Tank) includes a septic tank and seepage pit. The seepage pit provided approximately 18.4 m^2 (200 ft^2) of infiltration surface area and 8,700 L (2,300 gal) of fluid storage. The site is located southeast of the 182-N Building. The unit was pumped and isolated after the 124-N-10 Septic Treatment Facility was placed in service in February 1987.	Accepted	Not Documented	N/A								
124-N-3	124-N-3, 124-N-3 Septic Tank, 100-N Sanitary Sewer System No. 3	Septic Tank	100-NR-1	Not Documented	A field visit in 1999 did not find any visual evidence of this site. The unit is a cesspool consisting of a 1,900 L (500 gal) precast concrete perforated pipe with a solid cover resting on a 0.61 m (2 ft) thick pad of crushed stone. There are no surface indications of the cesspool's location since there is no above-ground access port to the pit.	Accepted	Not Documented	N/A								
124-N-4	124-N-4, 100-N Sanitary Sewer System No. 4, 124-N-4 Septic Tank, 1903-N, 1903N	Septic Tank	100-NR-1	826.84 m^2	The site (100-N Sanitary Sewer System No. 4, 124-N-4 Septic Tank) includes a large drain field and two septic tanks, each 63,644 L (14,000 gal). The total infiltration surface area of the drain field was 826.8 m^2 (8,900 ft^2). The unit received approximately 136,400 L/day (30,000 gal/day) of sanitary sewage.	Accepted	Not Documented	N/A								
124-N-5	124-N-5, 100-N Sanitary Sewer System No. 5, 124-N-5 Septic Tank	Septic Tank	100-NR-1	89.19 m^2	The site (100-N Sanitary Sewer System No. 5, 124-N-5 Septic Tank) is in the middle of a large graveled lot, free of vegetation. The system serviced office buildings that did not generate hazardous or radioactive substances and is not located close to any other waste sites. The 124-N-5 Sanitary Sewer System was replaced by the new 124-N-10 Sanitary Sewer System in February 1987. The tank was isolated, pumped out, filled with sand, and abandoned in place. Fill dirt was placed over the drain field to a depth of 0.6 m (2 ft) or more. While Gydesen (1985) does not report why the fill dirt was placed on this drain field, he reports that the system was very overused, saturating the surface soils and supporting a thick growth of vegetation. The fill may have been an attempt to cut odors and provide a more solid surface to the ground surface.	Rejected	WSRF 2000-074	N/A								

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
124-N-6	124-N-6, 100-N Sanitary Sewer System No. 6, 124-N-6 Septic Tank	Septic Tank	100-NR-1	56.00 m^2	The site (100-N Sanitary Sewer System No. 6, 124-N-6 Septic Tank) received sanitary sewage from office trailers 1113-N, 1114-N, and 1115-N. The system serviced office buildings that did not generate hazardous or radioactive substances. This septic system was directly hooked up to Sanitary Sewer System No.7, (124-N-7). The 124-N-6 Sanitary Sewer System was replaced by the new 124-N-10 Sanitary Sewer System in February 1987. The tank was isolated, pumped out, filled with sand, and abandoned in place.	Rejected	WSRF 2000-078	N/A									
124-N-7	124-N-7, 100-N Sanitary Sewer System No. 7, 124-N-7 Septic Tank	Septic Tank	100-NR-1	510.97 m^2	The system (100-N Sanitary Sewer System No. 7, 124-N-7 Septic Tank) received approximately 19,700 L/day (5,200 gal/day) of sanitary sewage from office trailers 1103-N, 1104-N, and 1145-N and after modifications received sanitary sewage from 124-N-6 Sanitary Sewer System and the 1145-N Building. The system serviced office buildings that did not generate hazardous or radioactive substances. The 124-N-7 Sanitary Sewer System was replaced by the new 124-N-10 Sanitary Sewer System in February 1987. The tank was isolated, pumped out, filled with sand, and abandoned in place. The tank was then covered with a layer of parking lot gravel and can no longer be located.	Rejected	WSRF 2000-081	N/A									
124-N-8	124-N-8, 100-N Sanitary Sewer System No. 8, 124-N-8 Septic Tank	Septic Tank	100-NR-1	153.29 m^2	The system (100-N Sanitary Sewer System No. 8, 124-N-8 Septic Tank) received approximately 3,400 L/day (900 gal/day) of sanitary sewage from office trailers 1132-N, 1133-N, 1134-N and 1135-N. The system serviced office buildings that did not generate hazardous or radioactive substances. The 124-N-8 Sanitary Sewer System was replaced by the new 124-N-10 Sanitary Sewer and Lagoon System in February 1987. The tank was isolated, pumped out, filled with sand, and abandoned in place.	Rejected	WSRF 2000-092	N/A									
124-N-9	124-N-9, 124-N-9 Septic Tank, 100-N Sanitary Sewer System No. 9	Septic Tank	100-NR-1	11,355 L	The site (124-N-9 Septic Tank, 100-N Sanitary Sewer System No. 9) consists of two septic tanks and a drain field. Each tank has a volume of 11,360 L (3,000 gal), and the drain field has an infiltration surface area of 325 m^2 (3,500 ft^2). This unit receives approximately 8,300 L/day (2,200 gal/day) of sanitary sewage.	Accepted	Not Documented	N/A									

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
128-N-1	128-N-1, 100-N Burning Pit, 128-N-1 Burning Pit	Burn Pit	100-NR-1	Not Documented	The site (100-N Burning Pit) shows evidence of burning, in the form of burnt trash and cans. Most of the site has been backfilled. Combustible materials, such as nuisance vegetation and combustible wastes (office waste, tools and hardware, and potentially paints and solvents), have been burned at this site. The quantity of material burned at the site is unknown. Since the establishment of the Hanford Central Landfill (in the early 1970s), this unit has been used for burning nuisance vegetation only.	Accepted	Not Documented	N/A							
130-N-1	130-N-1, 183-N Backwash Discharge Pond, 126-N-1, 183-N Filter Backwash Pond and Pipeline	Pond	100-NR-1	Not Documented	The site (183-N Backwash Discharge Pond) consists of a natural marsh-like pond, which receives filter backwash from the 183-N Water Filter Plant. The unit receives filter backwash containing polyacrylamide and aluminum sulfate.	Accepted	Not Documented	N/A								
1908-N	1908-N, 1908-N Outfall	Outfall	100-NR-1	21 × 10 × 7	This site consists of an open-topped, compartmentalized, reinforced concrete outfall structure used as a sump for several discharge lines and to drop the liquid discharge level for overflow to the river. The outfall also discharged to a flume, which was used as an alternative to the river pipelines. The outfall received more than 2 million m^3 per day of single pass raw river water from the Circulating Raw Water (CRW) System, and discharged it to the river. During a site visit in 2005, the structure was found to be intact. Originally, the 1908-N Outfall, Spillway (Flume) and river pipelines were entered into WIDS as one site number (1908-N). Due to remediation project needs of the outfall structure, the River Effluent Discharge lines (100-N-77) and the spillways (flumes) (100-N-79) have been documented as separate waste sites. An unknown level of radioactive contamination exists within the structure because the discharge lines were associated with the reactor's secondary steam system. Therefore, while no specific COPCs have been identified, the outfall structure has potential radioactive contamination.	Accepted	Not Documented	N/A							

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
1908-NE	1908-NE, HGP Outfall, 1908-NE Building, HGP-SWMU No. 7	Outfall	100-NR-1	30.48 × 24.38	The site (HGP Outfall SWMU No. 7) consisted of an open-topped, compartmentalized, reinforced concrete outfall structure. The outfall received single pass raw river water, which had passed through the Hanford Generating Plant (HGP) condensers, as well as wastewater from the 100-N-1 Settling Basin. The site consisted of a seal well and a pipeline extending out into the Columbia River. The seal well was located on the riverbank, where condenser cooling water and wastewater from the 100-N-1 Settling Pond were discharged through the river pipeline extending a 1,000 ft into the river. Effluent from the nearby N Reactor did not enter into the HGP system or the 1908-NE Outfall. The preferred remedy from the ROD (Wilson, 1999) is institutional control; therefore, no remedial or demolition activities were conducted for the outfall site.	Interim Closed Out	HGP-CVP-SWMUs 5, 6, 7, 8, 9, & 10 WSRF 2004-060	2000 (confirmatory sampling)	2000 (confirmatory sampling)	N/A	N/A	Diesel range petroleum hydrocarbons	50 U	N/A	N/A	N/A
												Heavy oil range petroleum hydrocarbons	100 U	N/A	N/A	N/A
												Two Seal Well sludge sediment samples were collected, it was noted "UNABLE TO SAMPLE" for the remaining location(s). The remaining locations did not have sludge present and attempts to retrieve sludge from alternate locations also revealed no sludge present. Sludge samples were not analyzed for total metals; however,TCLP cadmium, chromium and mercury were below detection, though lead by TCLP was in both leachates, at 0.05 mg/L. Diesel and lube oil range organics were not detected in the 2 samples. Gamma spectroscopy results were below detection for Co-60 for both samples. One seal well water sample associated with the outfall detected Co-60 at -0.98 pCi/g and Cs-137 at -4.56 pCi/g.				
2607-FSM	2607-FSM, 609 Building Septic Tank 2607-FSM, 100 Area Fire Station Septic Tank, 1607-FSM, 6607-FSM	Septic Tank	100-NR-1	3.35 × 1.37	The site (100 Area Fire Station Septic Tank) is a single-chamber, reinforced concrete tank. This unit includes a drainfield. It receives sanitary effluent from the 609 Building and disposes of it through a sub-surface soil absorption system. The septic system has also used 6607-FSM, 2607-FSM and 1607-FSM site name designations.	Accepted	Not Documented	N/A									
600-32	600-32, N Area Landfill	Dumping Area	100-NR-1	426.72 × 304.8	The site (HGP Construction Debris Dump Solid Waste Site, SWMU No. 11) is a large area consisting of a series of pits and depressions containing soil, rock, concrete, metal, wood, and asphalt that have been dumped in the area over time. The site was used to dispose of non hazardous construction debris from 100-N and the HGP. The site is associated with 600-32 and 100-N-39, which are duplicate codes for the same site, a dumping area contained within the larger 100-N-19 Dumping Area. Various suspect waste site investigations and documents have identified waste dumps associated with the HGP and the BPA substation. The site descriptions in each document are similar but the location sketches are different, indicating various pits outside the HGP/BPA substation fence. These dumping areas have been entered into the WIDS database multiple times with various different names because the reference document authors were not aware of the other references.	Rejected	WSRF 2000-113	N/A								

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
600-339	100 Area Fire Station Dry Well	French Drain	100-NR-1			Accepted										
600-340	600-340, 100 Area Fire Station Soil Stained Areas	Unplanned Release	100-NR-1	Not Documented	This site consists of two (2) locations, one with discolored top soil and the other with a white granular stain surface area.	Accepted	Not Documented	N/A	N/A	N/A	N/A	N/A				
600-347	100 Area Fire Station Burn Pit	Burn Pit	100-NR-1			Accepted										
600-348	100 Area Fire Station Underground Storage Tanks	Storage Tank	100-NR-1			Accepted										
600-35	600-35, Rock Screening Area	Dumping Area	100-NR-1	91.44 × 91.44	This relatively flat site appears to be a former rock crushing/screening operation and borrow pit (on the northern edge). The ground is covered with fine gravel chips with little or no vegetation. Miscellaneous surface debris (ladder, pipe, wire rope, wood, aluminum pieces, lead acid battery, 55 gal drum) was the only waste identified at this site. Arrangements were made to remove/dispose of the drum and battery. The operation date for this site is unknown, but it is believed to have been pre-1980. The waste type has been designated as "potentially hazardous." The release potential is negligible.	Accepted	Not Documented	N/A								
628-2	628-2, 100 Area Fire Station Burn Pit	Burn Pit	100-NR-1	1011 m^2	The site (100 Area Fire Station Burn Pit) is an unmarked pit composed of sand and dirt with sparse vegetation (cheatgrass, bunch grasses, some sagebrush) showing signs of stress. The site has ash, debris (charred wood, metal, electrical wiring and equipment, roofing material), and soil discoloration. The original information indicates that mainly motor oil and diesel fuel contaminated with water or deemed unusable was burned; however, there is no supporting written documentation. Other chemicals were potentially burned at the site. Information indicates the burn pit was approximately 0.9 to 1.2 m (3 to 4 ft) deep and 1.8 m (6 ft) in diameter. However physical evidence (e.g., ash, debris, soil discoloration, etc.) indicates the area affected by the burning activities is considerably larger (approximately 0.10 ha [0.25 ac]). Soil sampling is required.	Accepted	Not Documented	N/A								

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
UPR-100-N-1	UPR-100-N-1, 100-N 1304-N Dump Tank, UN-100-N-1, Emergency Dump Tank Inlet Valve Box Leak	Unplanned Release	100-NR-1	1858 m^2	The site is an unplanned release extending from the 1304-N Emergency Dump Tank to the front of the 181-N River Water Pump House, approximately 45 m (147 ft) from the Columbia River. On March 27, 1974, an estimated 113,550 L (30,000 gal) of radioactive water leaked onto the ground due to a line leak from the inlet valve box near the 1304-N Emergency Dump Tank. The water flowed down the bank from the Emergency Dump Tank, covered the roadway below the tank, and extended to the front of the 181-N Building. An estimated 139 m^2 (1,500 ft^2) was contaminated outside the 100-N area security fence. The security fence is considered the site boundary. Contaminated soil reading greater than 1,000 counts per minute was removed. The remainder was covered with clean fill. Observations and radiation surveys indicate that none of the contaminated water reached the river.	Accepted	Not Available	N/A								
UPR-100-N-10	UPR-100-N-10, 100-N Area 105-N Check Valve, UN-100-N-10, Lift Station Gravity Drain Line Leak	Unplanned Release	100-NR-1	3.05 × 3.05	Approximately 379 L (100 gal) of contaminated water leaked to the ground during preparations for the removal of a check valve in the gravity drain line to the lift station on May 13, 1975. Pumps were shut down, and a small dirt dam was built to confine the water within the existing radiation zone boundary. The contaminated soil was secured with a plastic cover until it could be removed. (Note: there is no record of the contaminated soil being removed although UNI-75-18 states that "contaminated dirt will be removed and disposed of before August 1, 1975.")	Accepted	Not Documented	N/A								

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
UPR-100-N-11	UPR-100-N-11, Five Hundred Pound Valve Bonnet Contamination in Uncontrolled Area, 100-N Area Valve Bonnet, UN-100-N-11	Unplanned Release	100-NR-1	9.1 × 0.3	A contaminated 227 kg (500 lb) valve bonnet, wooden box, and plastic wrapping fell from a truck onto the road and into a field adjacent to the roadway. The wooden box broke open spreading spot contamination on the roadway and in the field. Contamination levels measured were: on roadway blacktop (impact/ contact) – 1,000 mrads/ hr; on roadway adjacent to where valve hit – 20,000 to 50,000 counts per minute; area where valve came to rest – 5 rads to 10 rads per hour; area adjacent to where valve came to rest – 25,000 to 50,000 counts per minute. The following day the remaining contamination was removed. Approximately 6.1 m^3 (8 yd^3) of dirt and 0.38 m^3 (0.5 yd^3) of blacktop were removed and transported to 200 West Area for burial. There is a high probability non-fixed (spot) radioactive contamination was blown into the surrounding area from winds that were at least 30.6 km (19 mi) per hour during the early morning hours prior to work resuming on cleanup.	Accepted	Not Documented	N/A								
UPR-100-N-12	UPR-100-N-12, Spacer Transport Line Leak, UN-100-N-12	Unplanned Release	100-NR-1	0.61 × 0.91 × 18.29	The site began as sink hole resulting from a leak in the dummy fuel spacer transfer line. The maximum leak rate was estimated to be 284 L (75 gal) per minute. Potential for contamination remains as there is no record or reason to believe that the contaminated soil was excavated to the Hanford Unconfined Aquifer. There is also no record of the disposition of excavated radioactive contaminated soil. The transport line was repaired, and the sink hole was filled with clean soil. The release consisted of 946,000 L (250,000 gal) of storage basin water containing 0.19 curies of cobalt-60, 0.4 curies of cesium-137, and 0.00057 curies of plutonium-239/240. The water was originally from the fuel storage basin and had been used to help dislodge fuel spacers through the spacer transport line.	Accepted	Not Documented	N/A								

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
UPR-100-N-13	UPR-100-N-13, 1314-N Loading Station, 1314-N Drywell Overflow, UN-100-N-13	Unplanned Release	100-NR-1	6.1 × 6.1	The release was located inside the radiation zone at the 1314-N Liquid Waste Loadout Station. While filling a railroad waste tank car, solution began overflowing from the tank car fittings. The solution flowed up through the catch basin drain. The catch basin overflowed into the adjacent dry well, which also filled and overflowed. Approximately 380 L (100 gal) of spent decontamination solution flowed out of the dry well and was released to the ground. The contaminated soil was properly packaged and shipped to a 200 Area Burial Ground. Some of the contaminated soil remaining was covered with clean fill.	Accepted	Not Documented	N/A									
UPR-100-N-14	UPR-100-N-14, 119-N Drain System Leak, UN-100-N-14	Unplanned Release	100-NR-1	74.32 m^2	While maintenance personnel were working on the 119-N drain system, to correct loss of coolant flow in a condensate collection sampler, backflow from the drain occurred. Irradiated reactor cooling water was discharged to the ground near the 119-N building. Soil contaminated over 1,000 counts/minute was removed and shipped to the 200 Area for disposal. Soil under 1,000 counts/minute was covered with clean fill.	Accepted	Not Documented	N/A									
UPR-100-N-15	UPR-100-N-15, 108-N Neutralization Sump Spill, UN-116-N-15, UN-100-N-15, Acid Spill at 108-N	Unplanned Release	100-NR-1	Not Documented	The release site consists of concrete structures and a graveled field. The release is a result of a leak in the discharge line from the 108-N neutralizing sump that was being used during cleanup activities following a sulfuric acid release inside of the 108-N Building. The surface leakage was neutralized with soda ash. No further actions were deemed necessary at that time. Acid and caustic spill sites are not contaminated based on natural buffering and dissociation processes in the soils.	Rejected	WSRF 2000-058	N/A									

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
UPR-100-N-17	UPR-100-N-17166-N Diesel Oil Supply Line Leak, UN-100-N-17	Unplanned Release	100-NR-1	Not Documented	The site is an unplanned release that occurred at the 166-N Tank Farm. External corrosion of a 10.2 cm (4 in.) diesel oil supply line, between the oil storage tank and the west dike, caused the line to leak and release diesel oil to the soil in August 1966. The oil drained through the soil to groundwater where it migrated toward the Columbia River. The line was excavated and repaired in September 1966. Oil near the river was collected in an interceptor trench and periodically burned off during 1967 in an attempt to intercept it before it could reach the river. (See related site 100-N-65.) Currently, all underground diesel oil transfer piping is treated for corrosion protection to preclude a reoccurrence of leakage.	Accepted	Not Documented	N/A							
UPR-100-N-18	UPR-100-N-18166-N Four in Diesel Oil Supply Line to 184-N Leak, UN-100-N-18	Unplanned Release	100-NR-1	Not Documented	The release consisted of diesel fuel and occurred between the 166-N Tank Farm and the 184-N Diesel Oil Day Tank when external corrosion caused leakage in the diesel oil supply line. The line was excavated and repaired.	Accepted	Not Documented	N/A								
UPR-100-N-19	UPR-100-N-19184-N Day Tank Fuel Oil Spill, UN-116-N-19, UN-100-N-19	Unplanned Release	100-NR-1	Not Documented	The release occurred at the 184-N Fuel Oil Day Tank when the day tank was overfilled, and No. 6 fuel oil spilled onto the ground. A site visit in July 1999 found that the Day Tanks have been removed. The tank foundations are located inside an area surrounded by light post and chain.	Accepted	Not Documented	N/A								
UPR-100-N-2	UPR-100-N-2, 100-N FLV-858 Valve Leak, UN-100-N-2	Unplanned Release	100-NR-1	28 m^2	A cracked drain line leaked mildly contaminated reactor effluent from a point 3 m (10 ft) below grade. The line was excavated and repaired, and the groundwater was monitored. Contaminated soil that was accessible was removed and replaced with clean fill. Contaminated dirt was sent to a 200 Area Burial Ground. Most of the contaminated water from the leak area was transferred with a portable pump to a steel basin designed to retain low level contaminated water. A shoreline survey was conducted at ground level and no detectable contamination was observed.	Accepted	Not Documented	N/A								

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
UPR-100-N-20	UPR-100-N-20166-N two inch Diesel Oil Return Line Leak, UN-116-N-20, UN-100-N-20	Unplanned Release	100-NR-1	Not Documented	The release site was located near Tank 1 in the 166-N Tank Farm. A return line was excavated and repaired and the groundwater was monitored. Oil-contaminated soil was removed, and a valve was installed to isolate this portion of the return line, which is no longer used. The release consisted of Number 2 diesel oil.	Accepted	Not Documented	N/A								
UPR-100-N-21	UPR-100-N-21184-N Diesel Oil Day Tank Overflow, UN-116-N-21, UN-100-N-21	Unplanned Release	100-NR-1	Not Documented	Failure of the tank-level annunciator caused overfilling of the day tank during an oil transfer on April 25, 1986. The release consisted of Number 2 diesel oil. Groundwater monitoring wells were sampled, and no oil was detected. The Day Tanks have been removed. The tank foundations are located inside a chained area.	Accepted	Not Documented	N/A								
UPR-100-N-22	UPR-100-N-22184-N Diesel Oil Supply Line Leak No. 1, UN-100-N-22, UN-116-N-22	Unplanned Release	100-NR-1	Not Documented	External corrosion caused the diesel oil supply line to leak. The release consisted of Number 2 diesel oil. The line was excavated and rerouted. Oil-contaminated soil was removed. Groundwater wells were sampled, and oil was detected in an adjacent well (N-16) in July 1986. Subsequently, residual oil was pumped from the groundwater through this monitoring well.	Accepted	Not Documented	N/A								
UPR-100-N-23	UPR-100-N-23184-N Diesel Oil Supply Line Leak No. 2, UN-100-N-23, UN-116-N-23	Unplanned Release	100-NR-1	Not Documented	External corrosion caused the diesel oil supply line to leak. The release consisted of Number 2 diesel oil. The line was isolated and excavated. Oil-contaminated soil was removed. Groundwater wells were sampled and residual oil was pumped from the groundwater.	Accepted	Not Documented	N/A								
UPR-100-N-24	UPR-100-N-24 166-N Fuel Oil Supply Line Leak, UN-116-N-24, UN-100-N-24	Unplanned Release	100-NR-1	Not Documented	The leak was caused by external corrosion brought on by a leaking heat trace line. Leakage occurred during routine oil transfer, and waste oil was periodically removed. The release consisted of Number 6 fuel oil.	Accepted	Not Documented	N/A								

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
UPR-100-N-25	UPR-100-N-25Uncontrolled Venting of 1310-N Tank, UN-100-N-25	Unplanned Release	100-NR-1	Not Documented	The release consisted of primary loop water and decontamination solution containing phosphoric acid and diethylthiourea adjacent to the 1310-N Chemical Waste Tank. An estimated 378 to 1,900 L (100 to 500 gal) of contaminated water was released to the ground inside the posted Radiation Zone. Radiological surveys found a maximum of 20,000 cpm after the release. The extent of contamination is unknown. However, a radiation survey showed no contamination outside of the posted zone. Localized contamination was covered with approximately 15 cm (6 in.) of clean fill.	Accepted	Not Documented	N/A								
UPR-100-N-26	UPR-100-N-26Backflow of Radioactive Waste in 1314-N Facility, UN-100-N-26	Unplanned Release	100-NR-1	Not Documented	Reactor decontamination solution backflowed while being pumped into a tank car, contaminating the floor of the valve pit at the 1314-N Radioactive Liquid Waste Load-Out Facility. The release consisted of reactor decontamination solution containing phosphoric acid and diethylthiourea. Most of the solution was pumped back into a tank car. The remaining solution was absorbed and sent to a 200 Area Burial Ground.	Accepted	Not Documented	N/A								
UPR-100-N-29	UPR-100-N-29130 4-N Dump Tank, Emergency Dump Tank Bypass Line Leak, UN-100-N-29	Unplanned Release	100-NR-1	9.14 × 1.22	A leaking check valve caused a release of primary coolant water on April 23, 1974. The leak consisted of primary coolant water containing radioactive fission and activation products, mostly manganese-56 and sodium-24. The release occurred on the east side of the 1304-N Emergency Dump Tank.	Accepted	Not Documented	N/A								
UPR-100-N-3	UPR-100-N-3, Dummy Fuel Transfer Line, UN-100-N-3, Spacer Disposal System Transport Line Leak, UN-116-N-3	Unplanned Release	100-NR-1	18.29 × 3.05 × 1.22	The site began as a sink hole as a result of a leak in the dummy fuel spacer transfer line that extends from the 100-N Fuel Storage Basin to the dummy disposal pit. Currently, the spill site is within a radiation control zone. This is also the location for UPR-100-N-10 and UPR-100-N-12. The line was repaired and the excavated contaminated soil was removed and taken to the 200 Area Burial Ground for disposal. The sink hole was filled and the area was covered with clean soil. Potential for contamination remains as there is no record or reason to believe that the contaminated soil was excavated to the aquifer.	Accepted	Not Documented	N/A								

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
UPR-100-N-30	UPR-100-N-30, 1304-N Dump Tank, Emergency Dump Tank Overflow, UN-100-N-30	Unplanned Release	100-NR-1	15.24 × 15.24	The site includes the ground surrounding the 1304-N Emergency Dump Tank. During a drawdown test, the tank overflowed, spilling primary coolant water. No water reached the river. There is no visual evidence of this release. At the time of the release, the area was posted as a Radiation Zone. The contaminated soil was temporarily stabilized in place using sand and fines as a cover. The contaminated soil was later removed and disposed of in the 200 Area.	Accepted	Not Documented	N/A								
UPR-100-N-31	UPR-100-N-31, Radioactive Effluent Water Spill Near 1301-N, UN-100-N-31	Unplanned Release	100-NR-1	188 m^2	The release occurred on the west side of the berm just west of the 1301-N Liquid Waste Disposal Facility. While sample lines were being installed in a 15 cm (6 in.) steel casing through the berm on the west side of the 1301-N Crib, the water level in the crib was raised 38 to 46 cm (15 to 18 in.) as a result of an Emergency Dump Tank drawdown test. Due to the increased water level, approximately 3,785 L (1,000 gal) of effluent was released, contaminating 186 m^2 (2,025 ft^2) of soil. The contaminated soil was removed and transported to the 200 Area for disposal. Clean fill was used to restore the area. The release occurred on July 22, 1974. No known confirmatory sample information exists for the remediation done after the release. It is not known if the site meets current cleanup standards.	Accepted	Not Documented	N/A								
UPR-100-N-32	UPR-100-N-32, 1304-N Dump Tank, Emergency Dump Tank Bypass Line Leak, UN-100-N-32	Unplanned Release	100-NR-1	Not Documented	The release occurred on the southeast side of the 1304-N Emergency Dump Tank when leaking check valve in the Emergency Dump Tank bypass line released radioactive effluent water to the ground. The contaminated soil was removed and disposed of in the 200 Area Burial Ground. Some of the contaminated soil was covered in place.	Accepted	Not Documented	N/A								
UPR-100-N-33	UPR-100-N-33, 108-N Acid Transfer Spill, UN-116-N-33, UN-100-N-33	Unplanned Release	100-NR-1	Not Documented	The location of this release is a graveled lot at the 108-N Chemical Unloading Facility (CUF) where approximately 3,800 L (1,000 gal) of 97% sulfuric acid was spilled during an acid transfer from a rail car to the sulfuric acid storage tank at 108-N. Acid and caustic spill sites have been neutralized or buffered by the soil and no longer exist in the soil as hazardous substances. There is no evidence of the spill at the site.	Rejected	WSRF 2000-059	N/A								

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
UPR-100-N-34	UPR-100-N-34, 108-N Tank Transfer, Sulfuric Acid Line Break, UN-100-N-34	Unplanned Release	100-NR-1	Not Documented	The release occurred in a concrete trench in a graveled lot. Approximately 12,870 L (3,400 gal) of 94% sulfuric acid was released to the ground from a sulfuric acid and sodium hydroxide line encasement at the encasement sump. Contamination was limited to the region near the sulfuric acid transfer line in the vicinity of the sump. The acid in the encasement was neutralized with 50% sodium hydroxide and pumped to the clearwell overflow. The acid that overflowed to the surrounding ground was neutralized with soda ash and liquid sodium hydroxide. Acid and caustic spill sites are not contaminated based on natural buffering and dissociation processes in the soils. There is no evidence of the spill at the site.	Rejected	WSRF 2000-060	N/A							
UPR-100-N-35	UPR-100-N-35, 100-N Fuel Basin Drainage System Leak, UN-116-N-35, 105-N Fuel Storage Basin Drainage System Leak, UN-100-N-35	Unplanned Release	100-NR-1	Not Documented	The release occurred at the 105-N Reactor Building. Routine sampling of the 100-N Area groundwater wells detected slightly elevated levels of iodine-131. Drawdown tests on the basin determined that the leak was not from the basin. Further tests and investigations determined the intermittent leak to be coming from a sub-basin drain line approximately 8.5 m (28 ft) below the ground. The leak, estimated to be less than 11 L (3 gal) per minute, occurred only during feed and bleed (addition of water) of the 100-N Fuel Basin. On December 5 and 8, 1986, the southwest basin weir and drain line were grouted and sealed off. Subsequent weekly sampling of adjacent groundwater wells showed no further elevated levels of radioactivity.	Accepted	Not Documented	N/A							
UPR-100-N-36	UPR-100-N-36, 184N Annex, 184N, Diesel Generator Area	Unplanned Release	100-NR-1	39.62 × 18.29	The unit is in a graveled area located between buildings 153N and 184N. The site is previously disturbed from historic spills. Numerous spills of diesel fuel and motor oil used for normal operation and maintenance occurred over a 13-year period when the site was used as a diesel air compressor staging area. The most recent spills have been cleaned up.	Accepted	Not Documented	N/A							

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
UPR-100-N-37	UPR-100-N-37, HGP Transformer Yard Oil Stained Gravel (SWMU No. 1)	Unplanned Release	100-NR-1	Not Documented	The site (HGP Transformer Yard Oil Stained Gravel [SWMU No. 1]) was located on the northwest side of the former 185-N Building. The transformer yard consisted of nine large transformers. Minor leaks from transformer oil pumps and piping had stained the concrete transformer pads and contaminated adjacent soil. Oil stains were visible at the base of every transformer in the yard. Mineral oil containing polychlorinated biphenyls (PCBs) and solvents was used routinely during equipment maintenance. WPPSS personnel indicated that dielectric fluid was used in the transformer that did not contain PCBs.	Interim Closed Out	HGP-CVP-SWMUs 1, 2, 3, & 4 WSRF 2004-059	2001	2004	Not Documented	Not Documented	Aroclor-1262	0.176	N/A	0.176 (max)	N/A
												Heavy Range Hydrocarbon (mineral oil)	779	N/A	779 (max)	N/A
												COCs were detected in less than 50% of the samples; therefore, the statistical value is the maximum detected value.				
UPR-100-N-38	UPR-100-N-38, 116-N-2 Facility Liquid Unplanned Release, 100-N Spring 1983 Caustic, Truck Spill 116-N-2	Unplanned Release	100-NR-1	Not Documented	In spring 1983, a tanker truck was offloading caustic sodium hydroxide to the silo (transfer tank) at 1310-N when a fitting came loose, spilling 380 L (100 gal) of sodium hydroxide to the soil. Acid and caustic spill sites are not contaminated based on natural buffering and dissociation processes in the soils.	Rejected	WSRF 2000-094	N/A									
UPR-100-N-39	UPR-100-N-39, Corridor 22 Suspect Liquid Unplanned Release (Cleaned Up)	Unplanned Release	100-NR-1	Not Documented	In 1983 or 1984, several hundred liters of radioactively contaminated water was spilled outside Corridor 22. Scrub water from the Fission Product Filter Trap overflowed and discharged to the ground. The concrete was painted over and an indeterminate amount of soil was removed. The site consists of a concrete slab and hatch cover posted "Surface Contamination." The surrounding area is gravel.	Accepted	Not Documented	N/A									
UPR-100-N-4	UPR-100-N-4, 1322-A Sump Overflow, UN-100-N-4	Unplanned Release	100-NR-1	139.35 m^2	The original site of contamination was the 1322-NA (Effluent Water Pilot Plant) floor and ground by the front and rear doors on outside. The site also includes the drainage tank in Building 1322-N (Waste Treatment Pilot Plant Facility). The 1322-N Drainage Tank top vent sprayed low-level radioactive water. The 1322-NA sink drain backed up and flowed over the 15 cm (6 in.) curb and onto the ground in the front and back of the building. Most or all of the contaminated soil was removed.	Accepted	Not Documented	N/A									

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
UPR-100-N-40	UPR-100-N-40, Regeneration Waste Transport System Liquid UPR 1 (06/14/86, Cleaned Up) 6/14/86 163-N Cation/Anion Regeneration Waste Spill, UN-116-N-27	Unplanned Release	100-NR-1	Not Documented	A leak was detected in the waste transport pipe while wastes from the anion and cation regeneration process were being routed to 120-N-2 Surface Impoundment. A sample was collected at the point of leak and found to have a pH of 1.4. It was estimated that 25,000 L (6,500 gal) of acidic regeneration waste had leaked to the ground and formed a pond in an area south and east of the 163-N/183-N Buildings. Caustic regeneration waste was pumped through the line and allowed to leak into the acidic pond to neutralize the spilled material until the pH of the spilled material reached 6.9. The neutralized liquid was released to the Columbia River via the outfall. An unknown amount of soil around the leak was excavated and disposed of. Based on the CVP for the 120-N-1 and 120-N-2 disposal sites and similar waste streams, this unplanned release should also meet 100-N cleanup standards.	Not Accepted	Discovery Site Evaluation Checklist	N/A							
UPR-100-N-41	UPR-100-N-41, Regeneration Waste Transport System Liquid UPR 2, 163-N Regeneration, Waste Spill	Unplanned Release	100-NR-1	Not Documented	A spill of acidic wastewater (pH 1.1) from the 163-N Demineralized Water Treatment Plant occurred when a temporary hose became dislodged for approximately 4 minutes during a discharge cycle, spilling approximately 3,800 L (1,000 gal) of the liquid. The corrective action was to add 82 kg (180 lb) of soda ash to the spill to neutralize the acid. Subsequent pH of the spill was 10.1 standard units. No cleanup action is mentioned in the occurrence report. Based on the CVP for the 120-N-1 and 120-N-2 waste sites and similar waste streams, this unplanned release should also meet 100-N cleanup standards.	Not Accepted	Discovery Site Evaluation Checklist	N/A							
UPR-100-N-42	UPR-100-N-42, 184-N Day Tank Area Liquid Unplanned Release, 10/9/87 184-N, Day Tank Diesel Oil Spill	Unplanned Release	100-NR-1		The 184-N Day Tank Area is surrounded by a 1.5 m (4.8 ft) concrete wall that is 25 m (85 ft) long by 12.8 m (42 ft) wide, has a sand floor, and contains two 130,000 L (35,000 gal) Number 6 fuel oil tanks and one 30,000 L (8,000 gal) diesel oil tank.	Accepted											

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
UPR-100-N-43	UPR-100-N-43, 166-N/184-N Pipelines Liquid Unplanned Release 2 (4/26/89, Cleaned Up)	Unplanned Release	100-NR-1	Not Documented	The release site occurred at the oil supply piping from the 166-N to 184-N Buildings. A diesel oil leak occurred at three locations along the pipeline from 166-N to 184-N Buildings at three different flange joints. The exact location of these flange joints is not given in the referenced descriptions. A total of 46 drums and 8 dump trucks of contaminated soil were removed. Sampling was conducted in nearby Wells N-16 and N-17 and oil was detected.	Accepted	Not Documented	N/A									
UPR-100-N-5	UPR-100-N-5, 1310-N Chemical Waste Storage Tank Leak, UN-100-N-5, 116-N-2 Radioactive Chemical Waste Treatment Storage Facility	Unplanned Release	100-NR-1	18.29 (deep)	The release occurred in the 1310-N Radioactive Chemical Waste Handling Facility (116-N-2) on the recirculation pump discharge line radioactive waste was discharged to the ground. Contaminated soil reading greater than 1,000 counts per minute was removed and taken to the 200 Area for disposal, and the remainder was covered with clean fill. Potential for contamination remains as there is no record that contaminated soil less than 1,000 counts per minute was ever removed, or that soil was removed to a depth of 18.3 m (60 ft), which is the depth to the aquifer.	Accepted	Not Documented	N/A									
UPR-100-N-6	UPR-100-N-6, 1 1/2 in. Chemical Decontam. Waste Drain Line Leaks, UN-100-N-6, UN-116-N-6, Chemical Decontamination Waste Drain Line Leak	Unplanned Release	100-NR-1	Not Documented	This site is a chemical decontamination waste drain line waste line, buried 0.9 m (3 ft) below grade and runs between the 1714N (Radioactive Chemical Waste Handling Facility) and the 1310N (Chemical Waste Storage Tank). The leaking line was repaired and approximately 16.7 m^3 (590 ft^3) of contaminated soil, reading 7,000 to 25,000 counts per minute was removed from four locations along the line. The excavations were backfilled with clean soil. The line was repaired and is no longer active. The contaminated soil was removed, which effectively removed any potential for further release from these specific locations. A site visit in August 2000 found a roped area east of 1714-N. The area was posted Underground Radioactive Material and Controlled Area. A soil mound was inside the roped area.	Accepted	Not Documented	N/A								

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
UPR-100-N-7	UPR-100-N-7, 10 inch Radioactive Drain Return Line Leak, UN-116-N-7, UN-100-N-7	Unplanned Release	100-NR-1	Not Documented	A leak occurred in a buried 25.4 cm (10 in.) drain line between the 109-N Building and the 1909-N Valve Pit. This pipe is approximately 69.4 m (228 ft) from the bank of the Columbia River. Contamination related to this event was identified during a field radiation survey on November 5, 1996. Adjacent groundwater monitoring wells detected increased levels of iodine-131, indicating a nearby leak to the water table. Groundwater monitoring wells were sampled daily until concentrations of iodine-131 had returned to background levels. Approximately 1,907,842 L (504,000 gal) leaked. The release occurred on April 29, 1985. The leaking pipe was repaired. All radionuclides except manganese-54, cobalt-60, and cerium-144 have undergone more than ten half-lives and are no longer present. The three remaining radionuclides bind readily to soil particles and are not present in groundwater monitoring samples. Approximately 32 m^3 (1,130 ft^3) of contaminated soil were removed and the hole was backfilled with clean soil.	Accepted	Not Documented	N/A								
UPR-100-N-8	UPR-100-N-8, 1322-A Sump Overflow, UN-100-N-8	Unplanned Release	100-NR-1	2.32 m^2	The original site of contamination was the 1322-NA (Effluent Water Pilot Plant) including the area surrounding the sump, floor, various pieces of equipment, and the ground just outside the rear door (south door). The release took place in the soil immediately outside the south door of 1322-NA Effluent Water Pilot Plant when a tygon sample tube came off the radioactive drain return line sampler sample line and up to 379 L (100 gal) of radioactive water was released to the soil. This is partly on the same location as UPR-100-N-4. Most of the contaminated soil was removed. The excavation was then backfilled with clean fill material.	Accepted	Not Documented	N/A								
UPR-100-N-9	UPR-100-N-9, 119-N Cooling Water Drain Line Leak, UN-100-N-9	Unplanned Release	100-NR-1	Not Documented	A backhoe accidentally ruptured a buried 5 cm (2 in.) diameter cooling water drain valve during exploratory digging. Contaminated water immediately flowed into the excavation hole around the valve at approximately 19 L (5 gal) per minute and maintained a water level 1.2 m (4 ft) below grade. A GM portable survey instrument held near the surface of the water read 20,000 counts per minute. Repair was completed on the 5 cm (2 in.) valve and drain line. An unknown amount of contaminated excavation spoils were removed to a 200 Area Burial Ground and the area was filled with clean soil.	Accepted	Not Documented	N/A								

Table B-1. 100-N Waste Sites Description and History

Site Code	Site Name	Site Type	Operable Unit	Site Dimensions (m)	Site History	Reclassification Status	Closure Document	Remedial Action Start Date	Remedial Action End Date	Contaminated Waste Volume to ERDF (metric tons)	Maximum Depth of Remedial Action (m)	COC	Max Concentration (pCi/g, mg/kg)		95% UCL (pCi/g, mg/kg)	
													Shallow[a]	Deep[b]	Shallow[a]	Deep[b]
UPR-600-17	UPR-600-17, 600 Area Patrol Boat Spill, UN-600-17	Unplanned Release	100-NR-1	Not Documented	The release occurred at the patrol boat refueling area just south of 100-N on the Columbia River. Gasoline was spilled inside a patrol boat during refueling operations, and gasoline was discharged from the boat to the shoreline. Because the site is periodically flooded by the Columbia River, and since the spill occurred in 1986 and has dissipated over that time, no trace of the gasoline spill is expected to remain.	Rejected	WSRF 2000-095	N/A								

Notes: Blanks indicate no information is available.

a. Shallow zone: soil 0 to 4.6 m (0 to 15 ft) in depth

b. Deep zone: soil greater than 4.6 m (15 ft) in depth

c. See CVP-2002-00002, Rev. 0. Excavation performed to 4.6 m below ground surface. Deep zone data is based on deep zone level I (to 2 m below excavation), deep zone level II (2 m to 9.3 m below excavation) and deep zone level III (9.3 m to 16.7 m below excavation). Highest value from combined deep zone level I - III data set presented. The highest level of contamination was found in the zone 2 m below the excavation floor (deep zone level I), and decreased with depth.

COC = contaminant of concern

D = Dilute

ERDF = Environmental Restoration Disposal Facility

J = estimated

N/A = not applicable

NC = not a COC for this zone

ND = not detected

U = undetected

UCL = upper confidence limit

Appendix C

100-N Area Maps

100-N Area Base Map

0 1,000 2,000 3,000 4,000 Feet

0 300 600 900 1,200 Meters

N

100N Wells
- AQUIFER TUBE
- WELL, EXTRACTION
- WELL, GROUNDWATER
- WELL, INJECTION

Waste Sites
- Accepted
- Interim Closed

Waste Site
- Accepted
- Interim Closed
- Not Accepted, Rejected or No Action

Waste Site
- Accepted
- Interim Closed
- Not Accepted, Rejected or No Action
- Discovery

Facilities

Strontium 90, pCi/L
- 8
- 80
- 800
- 8000

116-N-1
600-35
100-N-34
100-N-17
100-N-16
100-N-6
126-N-1
124-N-10
100-N-39
100-N-35
100-N-5
100-N-18
100-N-47
130-N-1
100-N-33
600-32
100-N-16
600-236
628-2
2607-FSM

N Reactor Area

0 375 750 1,125 1,500 Feet

0 100 200 300 400 Meters

N

100N Wells
- AQUIFER TUBE
- WELL, EXTRACTION
- WELL, GROUNDWATER
- WELL, INJECTION

Waste Sites
- Accepted
- Interim Closed

Waste Site
- Accepted
- Interim Closed
- Accepted, Rejected or No Action

Waste Site
- Accepted
- Interim Closed
- Not Accepted, Rejected or No Action
- Discovery

Facilities

Strontium 90, pCi/L
- 8
- 80
- 800
- 8000

100-N Strontium-90 Sites

0 300 600 900 1,200 Feet

0 100 200 300 400 Meters

N

100N Wells
- AQUIFER TUBE
- WELL, EXTRACTION
- WELL, GROUNDWATER
- WELL, INJECTION

100N_Strontium-90 Site
- Accepted
- Interim Closed
- Not Accepted, Rejected or No Action

100N_Strontium-90 Sites
- Accepted
- Interim Closed
- Not Accepted, Rejected or No Action
- Discovery

Facilities

Strontium 90, pCi/L
- 8
- 80
- 800
- 8000

CHPUBS1004-08.87

C1 Introduction

Maps showing the facilities and waste sites located in the 100-N area are provided on CD in the hard copy.

Table B-2. 100-N Crosswalk Facility to Waste

Facility	Waste Site
100-N Reactor Rod Caves	100-N-90 Storage
105-N/109-N Reactor Building Complex	100-N-66 Reactor
108-N Chemical Unloading Facility	100-N-8 Loading Dock
108-N Sump, 108-N Neutralization Pit	100-N-27 Sump
108-N/163-N Transfer Line And Neutralization Pit	120-N-5 Product Piping
109-N Ion Exchanger Resin Disposal Pit	100-N-28 Process Pit
1300-N Emergency Dump Basin	116-N-4 Retention Basin
1301-N Crib and Trench	116-N-1 Crib
1303-N Spacer Silos	118-N-1 Silo
1304-N Emergency Dump Tank	100-N-57 Catch Tank
1310-N Chemical Waste Storage Tank (The Golf Ball)	116-N-2 Storage Tank
1310-N Hazardous Waste Storage Area	120-N-4 Storage Pad (<90 day)
1324-N South Settling Pond	100-N-58 Pond
1324-N Surface Impoundment	120-N-2 Surface Impoundment
1324-NA Percolation Pond	120-N-1 Pond
1325-N Crib and Trench	116-N-3 Crib
151-N Substation Transformer and Oil Circuit Breakers	100-N-86 Electrical Substation
163-N Facility Resin Disposal Pit	100-N-23 Process Pit
163-N Mixed Waste and Hazardous Waste Container Storage Pad (aka 1330-N 90-Day Accumulation Areas)	116-N-8 Storage Pad (<90 day)
163-N Neutralization Pit and French Drain	120-N-3 French Drain
1716-NE Maintenance Garage	100-N-78 Maintenance Shop
181-N Building Waste Oil Tank	100-N-53 Storage Tank
183-N Filter Backwash Pond and Pipeline	130-N-1 Pond
185-N Bone Yard	100-N-5 Storage
185-N Building Oil Storage Area	100-N-51 Storage
185-N Diesel Oil Storage Tank	100-N-46 Storage Tank
185-N Gasoline Storage Tank	100-N-52 Storage Tank
185-N Septic Tank	100-N-95 Septic Tank
185-N Settling Pond	100-N-1 Pond

Table B-2. 100-N Crosswalk Facility to Waste

Facility	Waste Site
185-N Substation	100-N-35 Electrical Substation
185-N Tile Field	100-N-4 Drain/Tile Field
185-N Turbine Oil Filter Unit	100-N-50 Single-Shell Tank
1908-N Outfall	100-N-77:1 Outfall (Spillway) (also documented as 100-N-79 Outfall [Spillway]), 1908-N Outfall, 100-N-77 Radioactive Process Sewer
1908-NE Outfall	1908-NE Outfall, 100-N-80 Process Sewer

Source: C_RL_2008_46_ADD5_DFTB (04/12/2010), D_RL_2008_46_ADD5_DFTB (04/12/2010).

Appendix D

1324-N and 1324-NA Certification of Closure

Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

0058923

FEB 7 2003

03-RCA-0136

Mr. Michael A. Wilson, Program Manager
Nuclear Waste Program
State of Washington
Department of Ecology
1315 W. Fourth Avenue
Kennewick, Washington 99336

Dear Mr. Wilson:

CERTIFICATION OF CLOSURE FOR THE 1324-N SURFACE IMPOUNDMENT AND 1324-NA PERCOLATION POND

Closure activities for the 1324-N Surface Impoundment and the 1324-NA Percolation Pond (also known as 120-N-2 and 120-N-1 waste treatment sites, respectively) have been completed. Attachment 1 is the Owner/Operator Closure Certification, the independent Professional Engineer's (PE) Certification of Closure statement (Attachment 2), and the independent registered PE Closure Certification Report (Attachment 3) required for closure. The closure certifications were prepared in accordance with Washington Administrative Code (WAC) 173-303-610 and the approved 100-NR-1 Treatment, Storage, and Disposal Units Corrective Measures Study/Closure Plan (DOE/RL-96-39).

Closure activities were initiated in September 2001, pursuant to the closure plan (Attachment 42 of the "Hanford Facility Resource Conservation and Recovery Act Permit") that was approved by Ecology in a letter dated July 16, 1998. Closure activities consisted of excavation and disposal of debris from the 1324-N/NA Liquid Waste Disposal Facilities to an inert demolition landfill followed by verification sampling of the remaining soils. Verification sample results confirm residential clean-up levels were achieved for these sites. The independent PE certification and report state that all closure activities were performed in accordance with the approved plan.

Groundwater contamination attributable to these facilities remains above the secondary drinking water standard for sulfates (250 mg/L). Continued groundwater monitoring is required. Post-closure actions required to be taken by the U.S. Department of Energy, Richland Operations Office, during the post-closure care period for these facilities will be requested, via a permit modification, upon Ecology's approval of the closure certifications.

Mr. Michael A. Wilson
03-RCA-0136

-2-

FEB 7 2003

If you have any questions, please contact Ellen Dagan, of my staff, on (509) 376-3811.

Sincerely,

Joel Hebdon, Director
Regulatory Compliance and Analysis Division

RCA:EBD

Attachments

cc w/attachs:
N. Ceto, EPA
D. A. Faulk, EPA
J. Price, Ecology (2)
Administrative Record
Benton County Auditor

cc w/o attachs:
R. L. Donahoe, BHI
V. R. Dronen, BHI
H. B. Hathaway, RL
J. A. Hedges, Ecology

Attachment 1

OWNER/OPERATOR
CLOSURE CERTIFICATION
FOR
1324-N AND 1324 -NA LIQUID WASTE DISPOSAL FACILITIES

We, the undersigned, hereby certify that 1324-N and 1324-NA Liquid Waste Disposal Facilities (also referred as 120-N-2 and 120-N-1 waste treatment sites, respectively) closure activities were performed in accordance with the specifications in the Closure Plan, approved by Ecology in a letter dated July 16, 1998.

Owner/Operator
Keith A. Klein, Manager
U.S. Department of Energy
Richland Operations Office

2/13/03
Date

Co-Operator
Michael C. Hughes, President
Bechtel Hanford, Inc.

Jan 30, 2003
Date

Attachment 2

CERTIFICATION OF CLOSURE
OF THE 1324-NA AND 1324-N WASTE
TREATMENT, STORAGE, AND DISPOSAL SITES

As a registered professional engineer, I certify that the 1324-NA and 1324-N waste treatment sites have been closed in accordance with the closure plan for these sites. This certification is based on my understanding of the closure requirements, periodic visits to the sites to witness closure activity progress, discussions of closure progress with the project staff who monitor daily activities and compliance with the approved closure plan, and review of the cleanup verification package. Further, my review activities and certification have been an independent activity in accordance with *Washington Administrative Code* 173-303-610(6). CERTIFICATION OF CLOSURE

John N. Winters

January 29, 2003

John N. Winters, PE
State of Washington, License No. 30601
CH2M HILL, Inc.
3190 George Washington Way
Richland, Washington 99352